PUNJAB BOARD OF TECHNICAL EDUCATION

21-A, Kashmir Block Allama Iqbal Town, Lahore
www.pbte.edu.pkTel # 042-99260273 email: rnd.pbte@gmail.com
SAY NO TO CORRUPTION

No: PBTE/R&D/2026/23 Dated: 28-01-2026

NOTIFICATION

In pursuance of the NAVTTC Notification No. (D.G) (SS&C)/2021-QD-1 dated 26.11.2025, it is notified that the newly developed curricula of the following technologies have been approved by National Vocational & Technical Training Commission (NAVTTC) for their implementation in all institutes affiliated with PBTE.

- DAE in Marketing (Specialization in Digital Marketing) (03 Years)
- DAE in Textile & Fashion Design (03 Years)

The implementation of said technologies shall apply on the students who shall be registered for academic session 2026-27 and onward. Punjab Board of Technical Education shall conduct the examination of the said technologies w.e.f. 1st Annual Examination 2027. Soft copy of the curricula of the said technologies may be downloaded from the website of PBTE i.e. www.pbte.edu.pk/textbooks.html.

SECRETARY

CC to:

1- PS to Chairperson PBTE, Lahore.
2- PA to Secretary PBTE, Lahore.
3- PA to Controller of Examinations PBTE, Lahore.
4- PA to DG Academics TEVTA, Lahore.
5- PA to DG Operations TEVTA, Lahore.
6- The Principals concerned.
7- Deputy Controller of Examinations (Conduct) PBTE, Lahore
8- Deputy Controller of Examinations (Secrecy) PBTE, Lahore.
9- System Analyst PBTE, Lahore.
10-Assistant Controller of Examinations (Technical) PBTE, Lahore.
11-Assistant Controller of Examinations (Conduct) PBTE, Lahore.
12-Assistant Controller of Examinations (Secrecy) PBTE, Lahore.
13-Assistant Controller of Examinations (P&P-I) PBTE, Lahore.
14-Assistant Controller of Examinations (P&P-II) PBTE, Lahore.
15-Assistant Secretary (Recognition) PBTE, Lahore.
16-IPS PBTE, Lahore.
17-IOW PBTE, Lahore.
18-Web Administrator PBTE, Lahore to upload on website of PBTE.
19-Notification File.

CURRICULUM
FOR
DIPLOMA OF ASSOCIATE ENGINEER

IN
MARKETING（SPECIALIZATION IN DIGITAL MARKETING)

(3-Year Course)
Oct. 2025

CURRICULUM SALIENT

Qualification Title	3-Year Diploma of Associate Engineer (DAE) in Marketing (Specialization in Digital Marketing)
Qualification Stream	Technical
Duration of Course	3 Years (Annual System)
Total Training Credit Hours	68
Entry Level	Entry Level Matric with Science.
Annual Intake	As approved by the respective TEVTA
Methodology	Theory 40% ; Practical 60%
Instructional Medium	Urdu / English

SCHEME OF STUDIES

D.A.E. MARKETING (specialization in Digital Marketing.)

FIRST YEAR						
Code		**Subjects**	**Total Hrs**	**T**	**P**	**C**
Gen	101	Islamiat/Pakistan Studies	32	1	0	1
TTQ-111/Civic-111		Tarjumat-ul-Quran /Civics	32	1	0	1
Eng	112	English	64	2	0	2
Math	113	Applied Mathematics	96	3	0	3
Phy	132	Applied Physics	128	1	3	2
Ch	112	Applied Chemistry	128	1	3	2
Comp	102	Computer Applications	128	1	3	2
MDT	112	Fundamentals of Marketing	64	2	0	2
MDT	122	Fundamentals of Digital Marketing	64	2	0	2
MDT	132	Fundamentals of Management	64	2	0	2
MDT	142	Fashion Retail Management	64	2	0	2
MDT	152	Demand Insights	128	1	3	2
MDT	163	Consumer Behavior Analysis	160	2	3	3
MDT	172	Business Etiquette and Communication	128	1	3	2
Total			**1280**	**22**	**18**	**28**

SECOND YEAR						
Code		**Subjects**	**Total Hrs**	**T**	**P**	**C**
Gen	201	Islamiat/Pakistan Studies	32	1	0	1
TTQ-211/Civic-211		Tariumat-ul-Quran /Civics	32	1	0	1
Math	212	Applied Mathematics II	64	2	0	2
MDT	212	Fundamentals of Economics	64	2	0	2
MDT	222	Category Management	128	1	3	2
MDT	232	Sales Management	128	1	3	2
MDT	244	New Media Marketing	256	2	6	4
MDT	253	Digital Interactive Marketing	160	2	3	3
MDT	263	Digital Advertising Marketing	160	2	3	3
MDT	273	Live Streaming Marketing	160	2	3	3
Total			**1184**	**16**	**21**	**23**

THIRD YEAR						
Code		**Subjects**	**Total**	**T**	**P**	**C**
Gen	301	Islamiat/Pakistan Studies	32	1	0	1
MDT	311	Business Culture	32	1	0	1
MDT	322	Marketing and Planning	128	1	3	2
MDT	333	Brand Planning and Promotion	160	2	3	3
MDT	343	Business Data Analysis and Applications	160	2	3	3
MDT	353	Comprehensive Marketing Training	288	0	9	3
MDT	362	Digital Marketing Comprehensive Training	192	0	6	2
MDT	372	Comprehensive Enterprise Management Training	192	0	6	2
Total			**1184**	**7**	**30**	**17**

1st year

DAE in

MARKETING（SPECIALIZATION IN DIGITAL MARKETING)

Gen-101 ISLAMIAT AND PAK STUDIES

اسلامیات/مطالعہ پاکستان

		ٹی	پی	سی
حصہ اول اسلامیات	GEN III	1		
حصہ دوم مطالعہ پاکستان			0	1
موضوعات حصہ اول اسلامیات	سال اول	کل وقت: 20 گھنٹے		

کتاب وسنت

(ا) قرآن مجید

-1 تعارف قرآن مجید 2- نزول قرآن 3- مکی و مدنی سورتوں کی خصوصیات 4- وحی کی اقسام 5- پندرہ منتخب آیات مع ترجمہ

1.1 تنالو البر حتی تنفقوا مما تحبون

1.2 واعتصموا بحبل اللّٰہ جمیعا" ولا تفرقو

1.3 ولا یجرمنکم شنان قوم علی ان لا تعدلوا

1.4 ان اللّٰہ یامرکم ان تودوا الامانات الی اھلھا

1.5 ان اللّٰہ یامر بالعدل والاحسان

1.6 ان الصلوتہ تنھی عن الفحشاء والمنکر

1.7 لقد کان لکم فی رسول اللّٰہ سوۃ حسنتہ

1.8 ان اکرمکم عند اللّٰہ اتقاکم

1.9 وما آتاکم الرسول فخرزو ومانھی عنھوانتھوا

1.10 ولوفو بالعھد

1.11 وماشروھن بالمعروف

1.12 یمحق اللّٰہ الربوویر بی الصمدقات

1.13 واصبر علی ما اصابک

1.14 وقولو قولا سدیدا

1.15 ان الدین عنداللّٰہ السلام

(ب) سنت

-1 سنت کی اہمیت

-2 دس منتخب احادیث مع ترجمہ و تشریح

1- انما الاعمال بالنیات

2- انما بعثت لاتمم مکارم الاخلاق

3- لا یومن احدکم حتی یحب لاخیہ ما یحب لنفسہ

4- المسلم من سلم المسلمون من لسانہ ویدہ

5- قل امنت باللہ ثم استقم

6- خیرکم خیرکم لاہلہ

7- سباب المسلم فسوق وقتالہ کفر

8- المومن اخو المومن

9- کل المسلم علی المسلم حرام بمعہ وما لہ وعرضہ

10- ایتہ المنافق ثلاث اذا حدیث کذب واذا وعد اخلف واذا اوتمن خان

دین اسلام

2.1 اسلام کے بنیادی مقاصد کی وضاحت اور انسان کی انفرادی و اجتماعی زندگی پر ان کے اثرات

1- توحید

2- رسالت

3- آخرت

4- ملائکہ

5- آسمانی کتب

2.2 عبادات

1- نماز 2- روزہ 3- حج 4- زکوٰۃ

مندرجہ بالا عبادات کی اہمیت و فضیلت، حکمتیں اور انسان کی انفرادی و معاشرتی زندگی پر اس کے اثرات

حصہ اول

حصہ اسلامیات

تدریسی مقاصد

۱۔ قرآن مجید

عمومی مقصد: طالب علم یہ سمجھنے کے قابل ہو کہ اسلام کی تعلیمات کا اصل سرچشمہ قرآن مجید ہے

خصوصی مقاصد: طالب علم اس قابل ہو جائے گا کہ

☆ قرآن مجید کی تعریف کر سکے گا

☆ قرآن مجید کے نزول کی صورت بیان کر سکے

☆ قرآن مجید کی کی دس مدنی سورتوں کی پہچان کر سکے

☆ منتخب آیات کا ترجمہ و تشریح کر سکے

عمومی مقصد: یہ سمجھنے کے قابل ہو جائے گا کہ منتخب قرآنی آیات کے ذریعے اسلامی تعلیمات کا مفہوم کیا ہے

☆ قرآنی آیات کا ترجمہ تشریح کر سکے

☆ قرآنی تعلیمات کی روشنی میں اپنی اور معاشرتی اصلاح کر سکے

2. سنت

عمومی مقصد: طالب علم سنت نبوی کی اہمیت اور ضرورت کو اچھی طرح سمجھنے کے قابل ہو جائے گا

خصوصی مقصد:

☆ سنت کی تعریف بیان کر سکے

☆ سنت کی اہمیت و ضرورت کی وضاحت کر سکے

☆ سنت کی روشنی میں اسوہ حسنہ پر عمل کر سکے

3. منتخب احادیث نبویہ

عمومی مقصد: احادیث کی روشنی میں اخلاقی اقدار سے آگاہی حاصل کر سکے

خصوصی مقصد: احادیث کا ترجمہ و تشریح کر سکے

رسول اللہ ﷺ کے اسوۂ حسنہ کی پیروی کا جذبہ پیدا ہو سکے

دین اسلام

عمومی مقاصد: دین اسلام کے بنیادی مقاصد اور عبادات کے بارے میں جان سکے اور بیان کر سکے

خصوصی مقاصد

لفظ دین اسلام کے لغوی اور اصطلاحی معنی بیان کر سکے

اسلام کے بنیادی مقاصد کی اہمیت بیان کر سکے

اسلام کے بنیادی مقاصد سے انسان کی انفرادی و اجتماعی زندگی پر پڑنے والے اثرات بیان کر سکے

عبادت کے لغظی و اصطلاحی معنی بیان کر سکے

عقیدے اور عبادت کا فرق بیان کر سکے

عبادات (نماز، روزہ، حج، زکواۃ) کے فوری، اخلاقی اور انسانی زندگی پر ان کی اثرات بیان کر سکے

اسلامی مقاصد و عبادات کے مطابق اپنی زندگی ڈھال کر ایک اچھا مسلمان بن سکے

(غیر مسلم طلباء کے لئے)

نصاب اخلاقیات سال اول — GEN III

حصہ دوم مطالعہ پاکستان

کی	بی	ٹی
1	0	1

کل وقت- 20 گھنٹے

موضوعات

اخلاقیات کی تعریف اور اہمیت

اخلاقیات کا معیار (قانون، عقل، الہی کتب)

مندرجہ ذیل اخلاق کی وضاحت

- ☆ دیانت داری
- ☆ وعدہ داری
- ☆ نظم و ضبط
- ☆ راست گوئی
- ☆ صبر و استقلال
- ☆ حوصلہ مندی
- ☆ وقت کی پابندی
- ☆ صفائی
- ☆ ایثار
- ☆ باہمی احترام
- ☆ مصلحت

نصاب اخلاقیات (سال اول)

تدریسی مقاصد

عمومی مقاصد: اعلیٰ اخلاق کی وجہ سے ملکی ترقی میں مثبت قدر اضافہ کر سکے

خصوصی مقاصد: طالب اس علم سے اس قابل ہو گا کہ

- ☆ موضوعات کا مطلب بیان کر سکے
- ☆ عملی زندگی سے مثالوں کی نشاندہی کر سکے
- ☆ اپنی شخصیت اور معاشرے پر موضوعات کے مثبت اثرات پیدا کرنے کے طریقے بیان کر سکے
- ☆ دیانت داری کی اہمیت بیان کر سکے
- ☆ وفاداری کی اہمیت بیان کر سکے
- ☆ نظم و ضبط کی افادیت بیان کر سکے
- ☆ صدق بیان کی ضرورت بیان کر سکے
- ☆ حوصلہ مندی کے فوائد بیان کر سکے
- ☆ وقت کی پابندی کے فوائد بیان کر سکے
- ☆ صفائی اور باہمی اختیار سے حسن کارکردگی کو بیان کر سکے
- ☆ مصلحت کے فوائد بیان کر سکے

نصاب (سال اول) Gen III

حصہ دوئم　　مطالعہ پاکستان　　کل وقت 12 گھنٹے

موضوعات

☆ حریت فکر : مسلمان قوم میں آزادی فکر کی تاریخ - معاملات میں سیاسی آزادی کی اہمیت اور ضرورت - ذاتی، جماعتی غلامی کے نقصانات

☆ نظریہ پاکستان

قیام پاکستان کی اساس (دین اسلام) قیام پاکستان کی غرض و غایت نظریہ پاکستان کی وضاحت - نظریہ پاکستان اور علامہ اقبال اور قائداعظم کے ارشادات کی روشنی میں

☆ نظریہ پاکستان کا تاریخی پس منظر

محمد بن قاسم کی آمد - مجدد الف ثانی اور شاہ ولی اللہ کی تبلیغی خدمات سید احمد شہید کی تحریک مجاہدین

☆ اصلاحی تحریکیں

علی گڑھ - ندوۃ العلماء (لکھنؤ) - مدرسۃ الاسلام - (کراچی) اسلامیہ کالج (پشاور) انجمن حمایت اسلام (لاہور)

مطالعہ پاکستان (حصہ دوئم)

تدریسی مقاصد

حریت فکر:

عمومی مقصد

طالب علم یہ جان لے کہ اسلام میں اور مسلمان قوم میں آزادی فکر کی کیا اہمیت ہے

خصوصی مقاصد

☆ حریت فکر کا معنی و مفہوم بیان کر سکے

☆ آزادی فکر کی اہمیت بیان کر سکے

☆ خصوصاً اسلام میں آزادی اظہار رائے کی اہمیت بیان کر سکے

☆ ذہنی غلامی کے قومی سطح پر نقصانات کے بیان کر سکے

☆ جسمانی غلامی قومی سطح پر نقصانات بیان کر سکے

نظریہ پاکستان

عمومی مقصد:

نظریہ پاکستان (دین اسلام) سے پوری طرح واقفیت ہو جائے

خصوصی مقاصد:

☆ نظریہ کی تعریف بیان کر سکے اور اس کی وضاحت کر سکے

☆ نظریہ پاکستان کی تعریف کر سکے اور اس کا مفہوم بیان کر سکے

☆ علامہ اقبال اور قائداعظم کے فرمودات کی روشنی میں نظریہ پاکستان بیان کر سکے

نظریہ پاکستان کا تاریخی پہلو

عمومی مقصد

☆ نظریہ پاکستان کے تاریخی پس منظر سے واقفیت حاصل کر سکے

خصوصی مقاصد:

☆ محمد بن قاسم کے بارے میں بیان کر سکے

- محمد بن قاسم کے ہندوستان پر حملہ کی وجہ بیان کر سکے
- محمد بن قاسم کے ہندوستان پر حملہ کے اثرات بیان کر سکے
- بیان کر سکے کہ ہندوستان میں ہندو مسلم دو قومی نظریہ کا نکتہ آغاز کیا ہے
- مجدد الف ثانی کی علمی خدمات بیان کر سکے
- شاہ ولی اللہ کی علمی خدمات بیان کر سکے
- مجدد الف ثانی اور شاہ ولی اللہ نے جو تبلیغ دین اور مہمات میں سیاسی شعور پیدا کیا اسے بیان کر سکے

علمی تحریکیں

عمومی مقصد

- برصغیر کی علمی تحریکوں سے آگاہی حاصل ہو سکے

خصوصی مقاصد:

- علی گڑھ - دیوبند - ندوۃ العلماء مدرسۃ السلام ، اسلامیہ کالج۔ انجمن حمایت اسلام نے تعلیم کے ذریعہ سیاسی شعور مسلمانوں میں پیدا کیا اسے بیان کر سکے
- آزادی ہند کے سلسلہ میں تحریک مجاہدین کی خدمات بیان کر سکے

TTQ 111/ CIVIC-111 TARJUMA TUL QURAN / CIVICS

Theory	**32**	**T**	**P**	**C**
Practical	**0**	**1**	**0**	**1**

As per syllabus of BISE from PCTB/ PECTA Book

Eng-112 ENGLISH

Total Contact Hours	**T**	**P**	**C**
Theory 64 Hrs	**2**	**0**	**2**

AIMS: At the end of the course, the students will be equipped with cognitive skill to enable them to present facts in a systematic and logical manner to meet the language demands of dynamic field of commerce and industry for functional day-to-day use and will inculcate skills of reading, writing and comprehension.

COURSE CONTENTS

ENGLISH PAPER "A"

1. PROSE/TEXT 16 Hrs

1.1 First eight essays of Intermediate. English Book-II

2. CLOZE TEST 4 Hrs

1.2 A passage comprising 50-100 words will be selected from the text. Every 11th word or any word for that matter will be omitted. The number of missing word will range between 5-10. The chosen word may or may not be the one used in the text, but it should be an appropriate word.

ENGLISH PAPER "B"

3. GRAMMAR 26 Hrs

3.1 Sentence Structure.

3.2 Tenses.

3.3 Parts of speech.

3.4 Punctuation,

3.5 Change of Narration.

3.6 One word for several

3.7 Words often confused

4. COMPOSITION 8 Hrs

4.1 Letters/Messages

4.2 Job application letter

4.3 For character certificate/for grant of scholarship

4.4 Telegrams, Cablegrams and Radiograms, Telexes, Facsimiles

4.5 Essay writing

4.6 Technical Education, Science and Our life, Computers,

Environmental Pollution, Duties of a Student. **4 Hrs**

5. TRANSLATION 6 Hrs

5.1 Translation from Urdu into English.

For Foreign Students: A paragraph or a dialogue.

RECOMMENDED BOOKS

1. Intermediate English Book-II.
2. An English Grammar and Composition of Intermediate Level.
3. A Hand Book of English Students by Gatherer

Eng-112 ENGLISH

INSTRUCTIONAL OBJECTIVES

PAPER-A

1. DEMONSTRATE BETTER READING, COMPREHENSION AND VOCABULARY

1.1 Manipulate, skimming and scanning of the text.

1.2 Identify new ideas.

1.3 Reproduce facts, characters in own words

1.4 Write summary of stories

2. UNDERSTAND FACTS OF THE TEXT

2.1 Rewrite words to fill in the blanks recalling the text.

2.2 Use own words to fill in the blanks.

PAPER-B

3. APPLY THE RULES OF GRAMMAR IN WRITING AND SPEAKING

3.1 Use rules of grammar to construct meaningful sentences containing a subject and a predicate.

3.2 State classification of time, i.e. present, past and future and use verb tense correctly in different forms to denote relevant time.

3.3 Identify function words and content words.

3.4 Use marks of punctuation to make sense clear.

3.5 Relate what a person says in direct and indirect forms.

3.6 Compose his writings.

3.7 Distinguish between confusing words.

4. APPLY THE CONCEPTS OF COMPOSITION WRITING TO PRACTICAL SITUATIONS

4.1 Use concept to construct applications for employment, for character certificate, for grant of scholarship.

4.2 Define and write telegrams, cablegrams and radiograms, telexes, facsimiles

4.3 Describe steps of a good composition writing.

4.4 Describe features of a good composition.

4.5 Describe methods of composition writing.

4.6 Use these concepts to organize facts and describe them systematically impractical situation;

5. APPLIES RULES OF TRANSLATION

5.1 Describe confusion.

5.2 Describe rules of translation.

5.3 Use rules of translation from Urdu to English in simple paragraph and sentences.

Math-113 APPLIED MATHEMATICS

Total Contact Hours	**T**	**P**	**C**
Theory 96 Hrs	**3**	**0**	**3**

Pre-requisites: Must have completed a course of Elective Mathematics at Matric level.

AIMS: After completing the course the students will be able to

1. **Solve problems of Algebra, Trigonometry, vectors. Menstruation, Matrices and Determinants.**
2. **Develop skill, mathematical attitudes and logical perception in the use of mathematical instruments as required in the technological fields.**
3. **Acquire mathematical clarity and insight in the solution of technical problems.**

COURSE CONTENTS

1. **QUADRATIC EQUATIONS** **6 Hrs**

1.1 Standard Form
1.2 Solution
1.3 Nature of roots
1.4 Sum & Product of roots
1 .5 Formation
1.6 Problems

2. ARITHMETIC PROGRESSION AND SERIES **3Hrs**

2.1 Sequence
2.2 Series
2.3 nth term
2.4 Sum of the first n terms
2.5 Means
2.6 Problems

3. GEOMETRIC PROGRESSION AND SERIES **3Hrs**

3.1 nth term
3.2 sum of the first n terms
3.3 Means
3.4 Infinite Geometric progression
3.5 Problems

4. BINOMIAL THEOREM **6 Hrs**

4.1 Factorials
4.2 Binomial Expression
4.3 Binomial Co-efficient
4.4 Statement
4.5 The General Term
4.6 The Binomial Series.

4.7 Problems

5. PARTIAL FRACTIONS 6 Hrs

5.1 Introduction

5.2 Linear Distinct Factors Case I

5.3 Linear Repeated Factors Case II12

5.4 Quadratic Distinct Factors Case III

5.5 Quadratic Repeated Factors Case IV

5.6 Problems

6. FUNDAMENTALS OF TRIGONOMETRY 6 Hrs

6.1 Angles

6.2 Quadrants

6.3 Measurements of Angles

6.4 Relation between Sexagesimal & circular system

6.5 Relation between Length of a Circular Arc & the Radian Measure of its central Angle

6.6 Problems

7. TRIGONOMETRIC FUNCTIONS AND RATIOS 6 Hrs

7.1 trigonometric functions of any angle

7.2 Signs of trigonometric Functions

7.3 Trigonometric Ratios of particular Angles

7.4 Fundamental Identities

7.5 Problems

8. GENERAL IDENTITIES 6 Hrs

8.1 The Fundamental Law

8.2 Deductions

8.3 Sum & Difference Formulae

8.4 Double Angle Identities

8.5 Half Angle Identities

8.6 Conversion of sum or difference to products

8.7 Problems

9. SOLUTION OF TRIANGLES 6 Hrs

9.1 The law of Sines

9.2 The law of Cosines

9.3 Measurement of Heights & Distances

9.4 Problems

10. MENSURATION OF SOLIDS 30 Hrs

10.1 Review of regular plane figures and Simpson's Rule

10.2 Prisms

10.3 Cylinders

10.4 Pyramids

10.5 Cones
10.6 Frusta
10.7 Spheres

11. VECTORS 9 Hrs

11.1 Sealers & Vectors
11.2 Addition & Subtraction
11.3 The unit Vectors I, j, k
11.4 Direction Cosines
11.5 Sealer or Dot Product
11.6 Deductions
11.7 Dot product in terms of orthogonal components13
11.8 Deductions
11.9 Analytic Expression for a x b.
11.10 Problems.

12. MATRICES AND DETERMINANTS 9 Hrs

12.1 Definition of Matrix
12.2 Rows & Columns
12.3 Order of a Matrix
12.4 Algebra of Matrices
12.5 Determinants
12.6 Properties of Determinants
12.7 Solution of Linear Equations
12.8 Problems

REFERENCE BOOKS

A Text Book of Mathematics (Math-113) by TEVTA, authored by Sana ullah Kan, Tahir Hamid & Nasir ud-Din, published by National Book Foundation.

Math-113 APPLIED MATHEMATICS

INSTRUCTIONAL OBJECTIVES

1. USE DIFFERENT METHODS FOR THE SOLUTION OF QUADRATIC EQUATIONS

1.1 Define a standard quadratic equation.

1.2 Use methods of factorization and method of completing the square for solving the equations.

1.3 Derive quadratic formula.

1.4 Write expression for the discriminant

1.5 Explain nature of the roots of a quadratic equation.

1.6 Calculate sum and product of the roots.

1.7 Form a quadratic equation from the given roots.

1.8 Solve problems involving quadratic equations.

2. UNDERSTAND APPLY CONCEPT OF ARITHMETIC PROGRESSION AND SERIES

2.1 Define an Arithmetic sequence and a series

2.2 Derive formula for the nth term of an A.P.

2.3 Explain Arithmetic Mean between two given numbers

2.4 Insert n Arithmetic means between two numbers

2.5 Derive formulas for summation of an Arithmetic series

2.6 Solve problems on Arithmetic Progression and Series

3. UNDERSTAND GEOMETRIC PROGRESSION AND SERIES

3.1 Define a geometric sequence and a series.

3.2 Derive formula for nth term of a G.P.

3.3 Explain geometric mean between two numbers.

3.4 Insert n geometric means between two numbers.

3.5 Derive a formula for the summation of geometric Series.

3.6 Deduce a formula for the summation of an infinite G.P.

3.7 Solve problems using these formulas.

4. EXPAND AND EXTRACT ROOTS OF A BINOMIAL

4.1 State binomial theorem for positive integral index.

4.2 Explain binomial coefficients: (n,0), (n,1)……..(n,r),…….(n,n)

4.3 Derive expression for the general term.

4.4 Calculate the specified terms.

4.5 Expand a binomial of a given index.

4.6 Extract the specified roots

4.7 Compute the approximate value to a given decimal place.

4.8 Solve problems involving binomials.

5. RESOLVE A SINGLE FRACTION INTO PARTIAL FRACTIONS USING DIFFERENT METHODS.

5.1 Define a partial fraction, a proper and an improper fraction.

5.2 Explain all the four types of partial fractions.

5.3 Set up equivalent partial fractions for each type.

5.4 Explain the methods for finding constants involved.

5.5 Resolve a single fraction into partial fractions.

5.6 Solve problems involving all the four types.

6. UNDERSTAND SYSTEMS OF MEASUREMENT OF ANGLES.

6.1 Define angles and the related terms.15

6.2 Illustrate the generation of angle.

6.3 Explain sexagesimal and circular systems for the measurement of angles

6.4 Derive the relationship between radian and degree.

6.5 Convert radians to degrees and vice versa.

6.6 Derive a formula for the circular measure of a central angle.

6.7 Use this formula for solving problems.

7. APPLY BASIC CONCEPTS AND PRINCIPLES OF TRIGONOMETRIC FUNCTIONS

7.1 Define the basic trigonometric functions/ratios of an angle as ratios of the sides of a right triangle.

7.2 Derive fundamental identities.

7.3 Find trigonometric ratios of particular angles.

7.4 Draw the graph of trigonometric functions.

7.5 Solve problems involving trigonometric functions.

8. USE TRIGONOMETRIC IDENTITIES IN SOLVING TECHNOLOGICAL PROBLEMS

8.1 List fundamental identities

8.2 Prove the fundamental law

8.3 Deduce important results

8.4 Derive-sum and difference formulas

8.5 Establish half angle, double angle & triple angle formulas

8.6 Convert sum or difference into product& vice versa

8.7 Solve problems

9. USE CONCEPTS, PROPERTIES AND LAWS OF TRIGONOMETRIC FUNCTIONS FOR SOLVING TRIANGLES

9.1 Define angle of elevation and angle of depression.

9.2 Prove the law of sins and the law of cosines.

9.3 Explain elements of a triangle.

9.4 Solve triangles and the problems involving heights and distances.

10. USE PRINCIPLES OF MENSTRUATION IN FINDING SURFACES, VOLUMEAND WEIGHTS OF SOLIDS.

10.1 Define menstruation of plane and solid figures

10.2 List formulas for perimeters & areas of plane figure.

10.3 Define pyramid and cone.

10.4 Define frusta of pyramid and cone.

10.5 Define a sphere and a shell.

10.6 Calculate the total surface and volume of each type of solid.

10.7 Compute weight of solids.

10.8 Solve problems of these solids.

11. USE THE CONCEPT AND PRINCIPLES OF VECTORS IN SOLVING TECHNOLOGICAL PROBLEMS.

11.1 Define vector quantity.

11.2 Explain addition and subtraction of vector

11.3 Illustrate unit vectors I, j, k.

11.4 Express a vector in the component form.

11.5 Explain magnitude, unit vector, direction cosines of a vector.

11.6 Derive analytic expression for dot product and cross product of two vector.

11.7 Deduce conditions of perpendicularly and parallelism of two vectors.

11.8 Solve problems16

12. USE THE CONCEPT OFMATRICES & DETERMINANTS IN SOLVING TECHNOLOGICAL PROBLEMS

12.1 Define a matrix and a determinant.

12.2 List types of matrices.

12.3 Define transpose, ad joint and inverse of a matrix.

12.4 State properties of determinants.

12.5 Explain basic concepts.

12.6 Explain algebra of matrices.

12.7 Solve linear equation by matrices.

12.8 Explain the solution of a determinant.

12.9 Use crammers rule for solving linear equations.

Phy- 132 APPLIED PHYSICS

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**1**	**3**	**2**

AIMS: The students will be able to understand the fundamental principles and concept of physics, use these to solve problems in practical situations/technological courses and understand concepts to learn advance physics/technical courses.

COURSE CONTENTS

1. MEASUREMENT **2 Hrs**

1.1 Fundamental units and derived units
1.2 Systems of measurement and S.I. units
1.3 Concept of dimensions, dimensional formula
1.4 Conversion from one system to another
1.5 Significant figures

2. SCALARS AND VECTORS **4 Hrs**

2.1 Revision of head to tail rule
2.2 Laws of parallelogram, triangle and polygon of forces
2.3 Resolution of a vector
2.4 Addition of vectors by rectangular components
2.5 Multiplication of two vectors, dot product and cross product

3. MOTION **4 Hrs**

3.1 Review of laws and equations of motion
3.2 Law of conservation of momentum
3.3 Angular motion
3.4 Relation between linear and angular motion
3.5 Centripetal acceleration and force
3.6 Equations of angular motion

4. TORQUE, EQUILIBRIUM AND ROTATIONAL INERTIA **6 Hrs**

4.1 Torque
4.2 Centre of gravity and centre of mass
4.3 Equilibrium and its conditions
4.4 Torque and angular acceleration
4.5 Rotational inertia

5. WAVE MOTION **4 Hrs**

5.1 Review Hooke's law of elasticity
5.2 Motion under an elastic restoring force
5.3 Characteristics of simple harmonic motion

5.4 S.H.M. and circular motion

5.5 Simple pendulum

5.6 Wave form of S.H.M.

5.7 Resonance

5.8 Transverse vibration of a stretched string

6. SOUND **4 Hrs**

6.1 Longitudinal waves

6.2 Intensity, loudness, pitch and quality of sound

6.3 Units of Intensity of level and frequency response of ear

6.4 Interference of sound waves silence zones, beats

6.5 Acoustics

6.6 Doppler effect.

7. LIGHT **4 Hrs**

7.1 Review laws of reflection and refraction

7.2 Image formation by mirrors and lenses

7.3 Optical instruments

7.4 Wave theory of light

7.5 Interference, diffraction, polarization of light waves

7.6 Applications of polarization in sunglasses, optical activity and stress analysis

8 OPTICAL FIBRE **2 Hrs**

8.1 Optical communication and problems

8.2 Review total internal reflection and critical angle

8.3 Structure of optical fiber

8.4 Fiber material and manufacture

8.5 Optical fiber - uses.

9. LASERS **2 Hrs**

9.1 Corpuscular theory of light

9.2 Emission and absorption of light

9.3 Stimulated absorption and emission of light

9.4 Laser principle

9.5 Structure and working of lasers

9.6 Types of lasers with brief description.

9.7 Applications (basic concepts)

9.8 Material processing

9.9 Laser welding

9.10 Laser assisted machining

9.11 Micro machining

9.12 Drilling, scribing and marking

9.13 Printing

9.14 Lasers in medicine

RECOMMENDED BOOKS

1.Tahir Hussain, Fundamentals of Physics Vol-I and II
2.Farid Khawaja, Fundamentals of Physics Vol-I and II
3.Wells and Slusher, Schaum's Series Physics .
4.Nelkon and Oyborn, Advanced Level Practical Physics
5.Mehboob Ilahi Malik and Inam-ul-Haq, Practical Physics
6.Wilson, Lasers - Principles and Applications
7.M. Aslam Khan and M. Akram Sandhu, Experimental Physics Note Book

Phy-132 APPLIED PHYSICS

INSTRUCTIONAL OBJECTIVES

1. USE CONCEPTS OF MEASUREMENT TO PRACTICAL SITUATIONS AND TECHNOLOGICAL PROBLEMS

7.1 Write dimensional formulae for physical quantities

7.2 Derive units using dimensional equations

7.3 Convert a measurement from one system to another

7.4 Use concepts of measurement and Significant figures in problem solving.

8. USE CONCEPTS OF SCALARS AND VECTORS IN SOLVING PROBLEMS INVOLVING THESE CONCEPTS

8.1 Explain laws of parallelogram, triangle and polygon of forces

8.2 Describe method of resolution of a vector into components

8.3 Describe method of addition of vectors by rectangular components

8.4 Differentiate between dot product and cross product of vectors

8.5 Use the concepts in solving problems involving addition resolution and multiplication of vectors.

9. USE THE LAW OF CONSERVATION OF MOMENTUM AND CONCEPTS OF ANGULAR MOTION TO PRACTICAL SITUATIONS

9.1 Use law of conservation of momentum to practical/technological problems.

9.2 Explain relation between linear and angular motion

9.3 Use concepts and equations of angular motion to solve relevant technological problems.

10. USE CONCEPTS OF TORQUE, EQUILIBRIUM AND ROTATIONAL INERTIA TO PRACTICAL SITUATIONS/PROBLEMS

10.1 Explain Torque

10.2 Distinguish between Centre of gravity and centre of mass

10.3 Explain rotational Equilibrium and its conditions

10.4 Explain Rotational Inertia giving examples

10.5 Use the above concepts in solving technological problems.

11. USE CONCEPTS OF WAVE MOTION IN SOLVING RELEVANT PROBLEMS

11.1 Explain Hooke's Law of Elasticity

11.2 Derive formula for Motion under an elastic restoring force

11.3 Derive formulae for simple harmonic motion and simple pendulum

11.4 Explain wave form with reference to S.H.M. and circular motion

11.5 Explain Resonance

11.6 Explain Transverse vibration of a stretched string

11.7Use the above concepts and formulae of S.H.M. to solve relevant problems.

12. UNDERSTAND CONCEPTS OF SOUND

12.1 Describe longitudinal wave and its propagation

12.1 Explain the concepts: Intensity, loudness, pitch and quality of sound

12.2 Explain units of Intensity of level and frequency response of ear

12.3 Explain phenomena of silence zones, beats

12.4 Explain Acoustics of buildings

12.5 Explain Doppler Effect giving mathematical expressions.

13. USE THE CONCEPTS OF GEOMETRICAL OPTICS TO MIRRORS AND LENSES

13.1 Explain laws of reflection and refraction

13.2 Use mirror formula to solve problems

13.3 Use the concepts of image formation by mirrors and lenses to describe working of optical instruments, e.g. microscopes, telescopes, camera and sextant.

14. UNDERSTAND WAVE THEORY OF LIGHT

14.4 Explain wave theory of light

14.5 Explain phenomena of interference, diffraction, polarization of light waves

14.6 Describe uses of polarization given in the course contents.

15. UNDERSTAND THE STRUCTURE, WORKING AND USES OF OPTICAL FIBER

15.1 Explain the structure of the Optical Fiber

15.2 Explain its principle of working

15.3 Describe use of optical fiber in industry and medicine.

Phy-132 APPLIED PHYSICS

LIST OF PRACTICALS **96 Hrs**

1. Draw graphs representing the functions:
   a.y=mx for m=0, 0.5, 1, 2

b.$y=x^2$

c.y=1/x

2. Find the volume of a given solid cylinder using vernier callipers.
3. Find the area of cross-section of the given wire using micrometer screw gauge.
4. Prove that force is directly proportional to (a) mass, (b) acceleration, using fletchers' trolley.
5. Verify law of parallelogram of forces using Grave-sands apparatus.
6. Verify law of triangle of forces and Lami's theorem
7. Determine the weight of a given body using
   a. Law of parallelogram of forces
   b. Law of triangle of forces
   c. Lami's theorem
8. Verify law of polygon of forces using Grave-sands apparatus.
9. Locate the position and magnitude of resultant of like parallel forces.
10. Determine the resultant of two unlike parallel forces.
11. Find the weight of a given body using principle of moments.
12. Locate the centre of gravity of regular and irregular shaped bodies.
13. Find Young's Modules of Elasticity of a metallic wire.
14. Verify Hooke's Law using helical spring.
15. Study of frequency of stretched string with length.
16. Study of variation of frequency of stretched string with tension.
17. Study resonance of air column in resonance tube and find velocity of sound.
18. Find the frequency of the given tuning fork using resonance tube.
19. Find velocity of sound in rod by Kundt's tube.
20. Verify rectilinear propagation of light and study shadow formation.
21. Study effect of rotation of plane mirror on reflection.
22. Compare the refractive indices of given glass slabs.
23. Find focal length of concave mirror by locating centre of curvature.
24. Find focal length of concave mirror by object and image method
25. Find focal length of concave mirror with converging lens.
26. Find refractive index of glass by apparent depth.
27. Find refractive index of glass by spectrometer.
28. Find focal length of converging lens by plane mirror.
29. Find focal length of converging lens by displacement method.
30. Find focal length of diverging lense using converging lens.

31. Find focal length of diverging lens using concave mirror.
32. Find angular magnification of an astronomical telescope.
33. Find angular magnification of a simple microscope (magnifying glass)
34. Find angular magnification of a compound microscope.
35. Study working and structure of camera.
36. Study working and structure of sextant.
37. Compare the different scales of temperature and verify the conversion formula.
38. Determine the specific heat of lead shots.
39. Find the coefficient of linear expansion of a metallic rod.
40. Find the heat of fusion of ice.
41. Find the heat of vaporization.
42. Determine relative humidity using hygrometer

Ch-112 APPLIED CHEMISTRY

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**1**	**3**	**2**

Pre-requisite:The student must have studied the subject of elective chemistry at secondary, school level.

AIMS: After studying this course a student will be able to;

1.Understand the significance and role of chemistry in the development of modern technology.

2.Become acquainted with the basic principles of chemistry as applied in the study of relevant Technology.

3.Know the scientific methods for production, properties and use of materials of industrial & .technological significance.

4.Gains skill for the efficient conduct of practical's in a Chemistry lab.

COURSE CONTENTS

1. INTRODUCTION AND FUNDAMENTAL CONCEPTS 2 Hrs

1.1 Orientation with reference to this technology

1.2 Terms used & units of measurements in the study of chemistry

1.3 Chemical Reactions & their types

2. ATOMIC STRUCTURE 2 Hrs

2.1 Sub-atomic particles

2.2 Architecture of atoms of elements, Atomic No. & Atomic Weight

2.3 The periodic classification of elements periodic law

2.4 General characteristics of a period and group

3. CHEMICAL BOND 2 Hrs

3.1 Nature of chemical Bond

3.2 Electrovalent bond with examples

3.3 Covalent Bond (Polar and Non-polar, sigma & Pi Bonds with examples

3.4 Co-ordinate Bond with examples

4. WATER 2 Hrs

4.1 Chemical nature and properties.

4.2 Impurities

4.3 Hardness of water (types, causes & removal)

4.4 Scales of measuring hardness (Degrees Clark

4.5 Boiler feed water, scales & treatment

4.6 Sea-water desalination, sewage treatment

5. ACIDS, BASES AND SALTS 2 Hrs

5.1 Definitions with examples

5.2	Properties, their strength, basicity & Acidity	
5.3	Salts and their classification with examples	
5.4	pH-value and scale	
6.	**OXIDATION & REDUCTION**	**2 Hrs**
6.1	The process, definition& examples	
6.2	Oxidizing and reducing agents	
6.3	Oxides and their classifications	
7.	**NUCLEAR CHEMISTRY**	**2 Hrs**
7.1	Introduction	
7.2	Radioactivity (alpha, beta and gamma rays)	
7.3	Half life process	
7.4	Nuclear reaction & transformation of elements	
8.	**CEMENT**	**2 Hrs**
8.1	Introduction	
8.2	Composition and manufacture	
8.3	Chemistry of setting and hardening	
8.4	Special purpose cements	
9.	**GLASS**	**2 Hrs**
9.1	Composition and raw material	
9.2	Manufacture	
9.3	Varieties and uses	
10.	**PLASTICS AND POLYMERS**	**2 Hrs**
10.1	Introduction and importance	
10.2	Classification	
10.3	Manufacture	
10.4	Properties and uses	
11.	**PAINTS, VARNISHES AND DISTEMPER**	**2 Hrs**
11.1	Introduction	
11.2	Constituents	
11.3	Preparation and uses	
12.	**CORROSION**	**2 Hrs**
12.1	Introduction with causes	
12.2	Types of corrosion	
12.3	Rusting of iron	
12.4	Protective measures against-corrosion	
13.	**REFRACTORY MATERIALS AND ABRASIVE**	**2 Hrs**
13.1	Introduction to Refractories	
13.2	Classification of Refractories	
13.3	Properties and Uses	

13.4 Introduction to Abrasives

13.5 Artificial and Natural Abrasives and their uses

14. ALLOYS 2 Hrs

14.1 Introduction with need

14.2 Preparation and Properties

14.3 Some Important alloys and their composition

14.4 Uses

15. FUELS AND COMBUSTION 2 Hrs

15.1 Introduction of fuels

15.2 Classification of fuels

15.3 Combustion

15.4 Numerical Problems of Combustion

16. LUBRICANTS 1 Hr

16.1 Introduction.

16.2 Classification.

16.3 Properties of lubricants.

16.4 Selection of lubricants:

17. POLLUTION 1 Hr

17.1 The problem and its dangers.

17.2 Causes of pollution.

17.3 Remedies to combat the hazards of pollution.

BOOKS RECOMMENDED

1.Text Book of Intermediate Chemistry (I & II)

2.Ilmi Applied Science by Sh. Atta Muhammad

3.Polytechnic Chemistry by J. N. Reedy Tata McGraw Hill (New Delhi)

4.Chemistry for Engineers by P.C. Jain (New Delhi, India)

Ch-112 APPLIED CHEMISTRY

INSTRUCTIONAL OBJECTIVES

1. UNDERSTAND THE SCOPE, SIGNIFICANCE AND FUNDAMENTAL ROLE OF THE SUBJECT

1.1 Define chemistry and its important terms

1.2 State the units of measurements in the study of chemistry

1.3 Write chemical formula of common compounds

1.4 Describe types of chemical reactions with examples

2. UNDERSTAND THE STRUCTURE OF ATOMS AND ARRANGEMENT OF SUB ATOMIC PARTICLES IN THE ARCHITECTURE OF ATOMS

2.1 Define atom.

2.2 State the periodic law of elements.

2.3 Describe the fundamental sub atomic particles

2.4 Distinguish between atomic ho. and mass no.; isotopes and isobars

2.5 Explain the arrangements of electrons in different shells and sub energy levels

2.6 Explain the grouping and placing of ^elements' in the periodic table

3. UNDERSTAND THE NATURE OF CHEMICAL BOUND

3.1 Define chemical bond

3.2 Describe the nature of chemical bond

3.3 Differentiate between electrovalent and covalent bonding

3.4 Explain the formation of polar and non polar, sigma and pi-bond with examples

3.5 Describe the nature of coordinate bond with examples

4. UNDERSTAND THE CHEMICAL NATURE OF WATER

4.1 Describe the chemical nature of water with its formula

4.2 Describe the general impurities present in water

4.3 Explain the causes and methods to removing hardness of water

4.4 Express hardness .in different units like mg/Iiter, p.p.m, degrees Clark and degrees French

4.5 Describe the formation and nature of scales in boiler feed water

4.6 Explain the method for the treatment of scales

4.7 Explain the sewage treatment and desalination of sea water

5. UNDERSTAND THE NATURE OF ACIDS, BASES AND SALTS

5.1 Define acids, bases and salts with examples

5.2 State general properties of acids and bases

5.3 Differentiate between acidity and basicity and use the related terms

5.4 Define salts, state their classification with examples

5.5 Explain p-H value of solution and pH scale

6. UNDERSTAND THE PROCESS OF OXIDATION AND REDUCTION

6.1 Define oxidation

6.2 Explain the oxidation process with examples

6.3 Define reduction

6.4 Explain reduction process with examples

6.5 Define oxidizing and reducing-agents and give it least six examples of each

6.6 Define oxides

6.7 Classify the oxides and give example

7. UNDERSTAND THE FUNDAMENTALS OF NUCLEAR CHEMISTRY

7.1 Define nuclear chemistry and radio activity

7.2 Differentiate between alphas, Beta and Gamma particles

7.3 Explain hall-life process

7.4 Explain at least six nuclei reactions resulting in the transformation of some elements

7.5 State important uses of isotopes

8. UNDERSTAND THE MANUFACTURE, SETTING AND HARDENING CEMENT

8.1 Define port land cement and give its composition

8.2 Describe the method of manufacture

8.3 Describe the chemistry of setting and hardening of cement

8.4 Distinguish between ordinary and special purpose cement

9. UNDERSTAND THE PROCESS OF MANUFACTURE OF GLASS.

9.1 Define glass

9.2 Describe its composition and raw materials

9.3 Describe the manufacture of glass

9.4 explain its varieties and uses

10. UNDERSTAND THE NATURE AND IMPORTANCE OF PLASTICS POLYMERS

10.1. Define plastics and polymers

10.2 Explain the mechanism of polymerization

10.3 Describe the preparation and uses of some plastics/polymers

11. KNOW THE CHEMISTRY OF PAINTS, VARNISHES AND DISTEMPERS

11.1 Define paints, varnishes and distemper

11.2 State composition of each

11.3 State methods of preparation of each and their uses

12. UNDERSTAND THE PROCESS OF CORROSION WITH ITS CAUSES AND TYPES

12.1 Define corrosion

12.2 Describe different types of corrosion

12.3 State the causes of corrosion

12.4 Explain the process of rusting of iron

12.5 Describe methods to prevent/control corrosion

13. UNDERSTAND THE NATURE OF REFRACTORY MATERIALS AND ABRASIVE

13.1 Define refractory materials

13.2 Classify refractory materials

13.3 Describe properties and uses of refractories

13.4 Define abrasive.

13.5 Classify natural and artificial abrasives

13.6 Describe uses of abrasives

14. UNDERSTAND THE NATURE AND IMPORTANCE OF ALLOYS

14.1 Define alloy

14.2 Describe different methods for the preparation of alloys

14.3 Describe important properties of alloys

14 4 Enlist some important alloys with their composition, properties and uses

15. UNDERSTAND THE NATURE OF FUELS AND THEIR COMBUSTION

15.1 Define fuels

15.2 Classify fuels and make distinction of solid, liquid & gaseous fuels

15.3 Describe important Fuels

15.4 Explain combustion

15.5 Calculate air quantities in combustion, gases

16. UNDERSTAND THE NATURE OF LUBRICANTS.

16.1 Define a lubricant

16.2 Explain the uses of lubricants

16.3 Classify lubricants and cite examples

16.4 State important properties of oils, greases and solid lubricants

16.5 State the criteria for the selection of lubricant tor, particular purpose/job

17. UNDERSTAND THE NATURE OF POLLUTION

17.1 Define Pollution (air. water, food)

17.2 Describe the causes of environmental pollution.

17.3 Enlist some common pollutants.

17.4 Explain methods to prevent pollution

CH-112 APPLIED CHEMISTRY

LIST OF PRACTICALS **96 Hrs**

1. To introduce the common apparatus, glassware and chemical reagents used in the chemistry lab.
2. To purify a chemical substance by crystallization.
3. To separate a mixture of sand and salt.
4. To find the melting point of substance.
5. To find the pH of a solution with pH paper.
6. To separate a mixture of inks by chromatography.
7. To determine the co-efficient of viscosity of benzene with the help of Ostwald vasomotor.
8. To find the surface tension of a liquid with a stalagmometer.
9. To perform electrolysis of water to produce Hydrogen and Oxygen.
10. To determine the chemical equivalent of copper by electrolysis of Cu SO.
11. To get introduction with the scheme of analysis of salts for basic radicals.
12. To analyse 1st group radicals (Ag^{+} - Pb^{++} - Hg^{+}).
13. To make practice for detection 1st group radicals.
14. To get introduction with the scheme of II group radicals.
15. To detect and confirm II-A radicals (hg^{++}, Pb^{++++}, Cu^{+}, Cd^{++}, Bi^{+++}).
16. To detect and confirm II-B radicals Sn^{+++}, Sb^{+++}, As^{+++}).
17. To get introduction with the scheme of III group radicals (Fe^{+++} - Al^{+++}, Cr^{+++})
18. To detect and confirm Fe^{+++}, Al^{+++} and Cr^{+++}.
19. To get introduction with he scheme of IV group radicals.
20. To detect and confirm An^{++} and Mn^{++} radicals of IV group.
21. To detect and conform Co^{++} and Ni^{++} radicals of IV group.
22. To get introduction with the Acid Radical Scheme.
23. To detect dilute acid group.
24. To detect and confirm CO''_3 and HCO'_3 radicals.
25. To get introduction with the methods/apparatus of conducting volumetric estimations.
26. To prepare standard solution of a substance.
27. To find the strength of a given alkali solution.
28. To estimate HCO'_3 contents in water.
29. To find out the %age composition of a mixture solution of KNO_3 and KOH volumetrically.
30. To find the amount of chloride ions (Cl') in water volumetrically.

Comp-102 COMPUTER APPLICATIONS

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**1**	**3**	**2**

Pre-requisites: None

LEARNING OUTCOMES: This subject will enable the student to be familiar with the fundamental concepts of Computer Science. He will also learn MS-Windows, MS-Office, and Internet to elementary level.

COURSE CONTENTS

1. ELECTRONIC DATA PROCESSING (E.D.P.) 2 Hrs

1.1 Basic Terms of Computer Science Data & its, types, Information, Hardware, Software
1.2 Computer & its types
1.3 Block diagram of a computer system
1.4 BIT, Byte, RAM & ROM
1.5 Input &Output devices
1.6 Secondary storage devices
1.7 Types of Software
1.8 Programming Languages
1.9 Applications of computer in different fields
1.10 Application in Engineering, Education & Business

2. MS-WINDOWS 1 Hr

2.1 Introduction to Windows
2.2 Loading & Shut down process
2.3 Introduction to Desktop items (Creation of Icons, Shortcut, Folder & modify Taskbar)
2.4 Desktop properties
2.5 Use of Control Panel
2.6 Searching a document

3. MS-OFFICE (MS-WORD) 4 Hrs

3.1 Introduction to MS-Office
3.2 Introduction to MS-Word & its Screen
3.3 Create a new document
3.4 Editing & formatting the text
3.5 Saving & Opening a document
3.6 Page setup (Set the Margins & Paper)
3.7 Spell Check & Grammar
3.8 Paragraph Alignment
3.9 Inserting Page numbers, Symbols, Text box & Picture in the document

3.10 Use the different Format menu drop down commands(Drop Cap, Change Case, Bullet & Numbering and Border & Shading)

3.11 Insert the 'Table and it's Editing

3.12 Printing the document

3.13 Saving a document file as PDF format

4. MS-OFFICE (MS-EXCEL) 6 Hrs

4.1 Introduction to MS-Excel & its Screen

4.2 Entering data & apply formulas in worksheet

4.3 Editing & Formatting the Cells, Row & Colum30

4.4 Insert Graphs in sheet

4.5 Page setup, Print Preview & Printing

4.6 Types & Categories of Charts

5. MS. OFFICE (MS-POWER POINT) 2 Hrs

5.1 Introduction to MS-Power point

5.2 Creating a, presentation

5.3 Editing & formatting a text box

5.4 Adding pictures & colors to a slide

5.5 Making slide shows

5.6 Slide Transition

6. INTERNET & E-MAIL 1 Hr

6.1 Introduction to Internet & browser window

6.2 Searching, Saving and Print a page from internet

6.3 Creating, Reading & Sending E-Mail

6.4 Explain some advance features over the internet and search engines

7. Introduction to Graphics 16Hrs

7.1 Introduction to Graphics

7.2 Adobe Illustrator

7.3 Adobe Photoshop

Recommended Textbooks:

1. Bible Microsoft Office 2007 by John Walkenbach
2. Bible Microsoft Excel 2007 by John Walkenbach
3. Bible Microsoft PowerPoint 2007 by John Walkenbach
4. Andrew Faulkner and Conrad Shavez, Adobe Photoshop CC Classroom in a Book (2017 release), 1st Edition, Adobe Press

Comp-102 COMPUTER APPLICATIONS

INSTRUCTIONAL OBJECTIVES

1. UNDERSTAND ELECTRONIC DATA PROCESSING (E.D.P)

1.1. Describe Basic Terms of Computer Science.Data& its Types, Information, Hardware,Software

1.2. Explain Computer & its types

1.3. Explain Block diagram of a computer system

1.4. State the terms such as BIT, Byte, RAM & ROM

1.5. Identify Input & Output devices

1.6. Describe Secondary Storage devices

1.7. Explain Types of Software

1.8. Introduction to Programming Language

1.9. Explain Applications of computer in different fields

1.10. Application in Engineering, Education & Business

2. UNDERSTAND MS-WINDOWS

2.1 Explain Introduction to Windows

2.2 Describe Loading & Shut down process

2.3 Explain Introduction to Desktop items(Creation of Icons, Shortcut, Folder & modify Taskbar)

2.4 Explain Desktop properties

2.5 Describe Use' of Control Panel (add/remove program, time & date, mouse and create user account)

2.6 Explain the method of searching a document

3. UNDERSTAND MS-OFFICE (MS-WORD)

3.1 Explain Introduction to MS-Office

3.2 Describe -Introduction to MS-Word & its Screen

3.3 Describe create a new document

3.4 Explain Editing & formatting the text

3.5 Describe saving & Opening a document

3.6 Explain Page setup, (Set the Margins & Paper)

3.7 Describe Spell Check & Grammar

3.8 Explain Paragraph Alignment

3.9 Explain Inserting Page numbers, Symbols, Text box & Picture in the document

3.10 Describe Use the different Format menu drop down commands(Drop Cap, Change Case, Bullet &Numbering and Border & Shading)

3.11 Explain Insert the Table and its Editing and modifying

3.12 Describe printing the document

3.13 Describe the method of file saving as a PDF Format

4. UNDERSTAND MS-OFFICE (MS-EXCEL)

4.1 Explain Introduction to MS-Excel & its Screen

4.2 Describe Entering data & apply formulas in worksheet

4.3 Describe Editing &Formatting the, Cells, Row & Column

4.4 Explain Insert Graphs in sheet

4.5 Describe Page setup, Print preview & Printing

4.6 Explain in details formulas for sum, subtract, multiply, divide, average

4.7 Explain in details the types of charts e.g pie chart, bar chart

5. UNDERSTAND MS-OFFICE (MS-POWER POINT)

5.1 Describe Introduction to MS-Power point

5.2 Explain creating a presentation

5.3 Describe Editing & formatting a text box

5.4 Explain Adding pictures & colors to a slide32

5.5 Describe Making slide shows

5.6 Explain Slide Transitions

6. UNDERSTAND INTERNET &E-MAIL

6.1 Explain Introduction to Internet and browser window

6.2 Explain Searching, Saving and Print a page from internet

6.3 Describe Creating, Reading & Sending E-Mail and attachments

6.4 Explain some advance features over the internet and how to search topics on different search engines

7. INTRODUCTION TO GRAPHICS

7.1 To learn about graphics in Corel Draw

7.2 To learn vector graphics

7.3 To learn about composing

7.4 To learn about graphics in Adobe Photoshop

7.5 To learn about modification in pictures

7.6 To apply various filters in pictures33

Comp-102 COMPUTER APPLICATIONS

LIST OF PRACTICALS **96 Hrs**

1. Practice of loading and shutdown of operating system
2. Creating items (icons, shortcut, folders etc) and modifying taskbar
3. Changing of wallpaper, screensaver, and resolution
4. Practice of control panel items (add/remove, time and date, mouse, and create user account)
5. Identifying the MS Word Screen and its menu
6. Practice of create a new document, saving and re-opening it from the location and spell check & grammar
7. Practice of Page Formatting (Borders, Character Spacing, Paragraph, Bullets& Numberings and Fonts)
8. Practice of different tool bars like standard, format& drawing tool bars
9. Practice of Insert pictures, clipart, and shapes
10. Practice of header and footer
11. Practice of insert table and also format of table
12. Practice of page setup, set the page margins, and printing documents
13. Identifying the MS EXCEL Screen and its menu
14. Practice of create a new sheet, saving and re-opening it from the location and spell check
15. Practice of insert and delete of row and columns (format of cell)
16. Practice of entering data and formulas in worksheet(Add, Subtract, Multiplying, and Divide & Average)
17. Repeating practical serial number04
18. Practice of insert chart and its types
19. Practice of page setup, set the page margins, and printing
20. Identifying the MS POWER POINT Screen and its menu
21. Practice of create a new presentation and save
22. Practice of open saves presentations
23. Practice of inset picture and videos
24. Identifying internet explorer
25. Practice of searching data from any search engine
26. Practice of create an E-Mail account and how to send and receive mails, download Attachments
27. To make exercises of basic tools in Illustrator (10 exercises)
28. To make various visiting cards (5 exercises)
29. To exercise the about composing (5 exercises)
30. To make logos (5 exercises)
31. To make exercise of basic tools Adobe Photoshop (10 exercises)

32. To make exercise in modification in pictures (10 exercises)
33. To apply various filters in pictures (15 exercises)

MDT-112 FUNDAMENTALS OF MARKETING

Total Contact Hours	**T**	**P**	**C**
Theory 64 Hrs	**2**	**0**	**2**

AIMS: Through systematic learning, students should comprehensively grasp the core concepts, principles, and strategic applications of marketing. By conducting in-depth marketing environment analysis, comprehensive market research, and precise market positioning, students will be able to effectively apply product, pricing, distribution, and promotional strategies to enhance market competitiveness and achieve brand value growth. This course lays a solid foundation for future marketing practices in their professional careers.

COURSE CONTENTS

1. OVERVIEW OF MARKETING 6 Hrs

1.1 Concept of marketing

1.2 Content scope of marketing

1.3 Marketing mix

1.4 Marketing and digital marketing

1.5 Artificial Intelligence (AI) in Marketing

1.6 Social Media & Influencer Marketing

2. MARKETING ENVIRONMENT ANALYSIS 8 Hrs

2.1 Meaning and characteristics of the marketing environment

2.2 Macro environmental analysis

2.3 Micro environmental analysis

2.4 Methods for marketing environment analysis

2.5 Competitive environment analysis

2.6 Consumer analysis

2.7 Analysis of supplier and marketing intermediary

2.8 Sustainability and Green Marketing Environment

3. MARKET RESEARCH 4 Hrs

3.1 Role of market research

3.2 Types of market research

3.3 Principles of market research

3.4 Process of market research

3.5 Digital & Big Data Market Research

4.	**MARKET SEGMENTATION AND TARGET MARKET**	**10 Hrs**
4.1	Concept and role of market segmentation	
4.2	Methods of market segmentation	
4.3	Evaluation of market segments	
4.4	Selection of market segments	
4.5	Selection of target market	
4.6	Concept of market positioning	
4.7	Market positioning strategies	
4.8	Methods and steps of market positioning	
5.	**PRODUCT STRATEGIES**	**10 Hrs**
5.1	Overall concept and classification of products	
5.2	Concept of product life cycle	
5.3	Strategies for product life cycle	
5.4	Concept of product mix	
5.5	Product mix strategies	
5.6	Product differentiation	
5.7	Concept and types of new products	
5.8	New product development process	
5.9	New product development strategies	
5.10	Digital-first Product Launch Strategies	
6.	**PRICING STRATEGIES**	**10 Hrs**
6.1	Composition of product pricing	
6.2	Factors influencing pricing decisions	
6.3	Cost-oriented pricing methods	
6.4	Demand- oriented pricing methods	
6.5	Competition-oriented pricing methods	
6.6	Pricing strategies for new products	
6.7	Pricing strategies for product lines	
6.8	Psychological pricing strategies	
6.9	Discount pricing strategies	
6.10	Dynamic Pricing in E-commerce	
6.11	Subscription & Freemium Pricing Models	
7.	**DISTRIBUTION CHANNEL STRATEGIES**	**8 Hrs**
7.1	Concept of distribution channels	

7.2 Types of distribution channels

7.3 Strategies for distribution channel

7.4 Design of distribution channel

7.5 Management of distribution channels

7.6 Omni-Channel & E-commerce Distribution Strategies

8. PROMOTIONAL STRATEGIES 8 Hrs

8.1 Concept and role of promotion

8.2 Classification of promotion

8.3 Personal selling

8.4 Advertising promotion

8.5 Public relations management

8.6 Content Marketing & SEO

8.7 Social Media & Influencer-driven Promotion

Recommended Textbooks:

A. Marketing Management by Philip Kotler & Kevin Lane Keller

B. Essentials of Marketing Research by Hair, Wolfinbarger, Money, Samouel & Page

C. Digital Marketing Strategy by Simon Kingsnorth

D. Artificial Intelligence for Marketing by Jim Sterne

MDT-112 FUNDAMENTALS OF MARKETING

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE BASICS OF MARKETING

1.1 Understand the concept of marketing

1.2 Understand the role of marketing

1.3 Master the elements of the marketing mix and the principle of synergy

1.4 Understand the relationship and differences between traditional marketing and digital marketing

1.5 Understand emerging trends in marketing (AI, social media, influencer marketing, sustainability)

2. MASTER TEH DIMENSIONS AND METHODS OF MARKETING ENVIRONMENT ANALYSIS

2.1 Understand the concept and characteristics of the marketing environment

2.2 Familiarize yourself with the dimensions of macro-environment analysis

2.3 Familiarize yourself with the dimensions of micro-environment analysis

2.4 Master the methods of market environment analysis

2.5 Master the components of the competitive environment

2.6 Understand consumer types, buying behavior, motivations, and influencing factors

2.7 Understand the role of e-commerce platforms, digital ecosystems, and technology-driven intermediaries

3. MASTER THE ROLE AND METHODS OF MARKET RESEARCH

3.1 Understand the important role of market research

3.2 Master the types of market research, their characteristics, and applicable scenarios

3.3 Familiarize yourself with the principles of market research

3.4 Familiarize yourself with the process of market research

3.5 Apply digital tools, analytics, and big data in market research

4. MASTER MARKET SEGMENTATION AND TARGET MARKET

4.1 Understand the concept and role of market segmentation

4.2 Master the methods of market segmentation

4.3 Able to evaluate segmented markets

4.4 Able to select suitable segmented markets

4.5 Able to select target markets

4.6 Understand the concept of market positioning

4.7 Master market positioning strategies

4.8 Master the methods and steps of market positioning

4.9 Understand customer persona development and digital targeting techniques

5. MASTER PRODUCT STRATEGIES

5.1 Understand the concept of a product

5.2 Understand the concept of the product life-cycle

5.3 Master product life-cycle strategies

5.4 Understand the concept of product portfolio

5.5 Master product portfolio strategies

5.6 Understand the concept of product differentiation

5.7 Understand the concept and types of new products

5.8 Master the process of new product development

5.9 Master strategies for new product development

5.10 Understand ways to promote new products

5.11 Understand digital product strategies (apps, SaaS, online services)

6. MASTER PRICING STRATEGIES

6.1 Understand the components of product pricing

6.2 Understand the factors affecting pricing

6.3 Able to price using cost-oriented pricing

6.4 Able to price using demand-oriented pricing

6.5 Able to price using competition-oriented pricing

6.6 Master new product pricing strategies

6.7 Master pricing strategies for product lines

6.8 Master psychological pricing strategies

6.9 Master discount pricing strategies

6.10 Understand dynamic and AI-driven pricing strategies

7. MASTER DISTRIBUTION CHANNEL STRATEGIES

7.1 Understand the concept of distribution channels

7.2 Familiarize yourself with types of distribution channels

7.3 Master distribution channel strategies

7.4 Able to design distribution channels

7.5 Able to manage distribution channels

7.6 Understand online distribution, omnichannel, and direct-to-consumer (D2C) strategies

8. MASTER PROMOTION STRATEGIES

8.1 Understand the concept and role of promotions

8.2 Familiarize yourself with different types of promotions

8.3 Master personal selling methods

8.4 Master advertising methods

8.5 Master public relations management methods

8.6 Master digital marketing tools (SEO, SEM, email marketing, social media, influencer marketing)

8.7 Understand integrated marketing communications (IMC) in digital and traditional contexts

MDT-122 FUNDAMENTALS OF DIGITAL MARKETING

Total Contact Hours	**T**	**P**	**C**
Theory 64 Hrs	**2**	**0**	**2**

AIMS: Equip students with up-to-date knowledge and practical skills in digital marketing, including AI-generated content, performance analytics, social media advertising, and ethical digital practices. Learners will master the full digital marketing funnel using the latest platforms and tools.

COURSE CONTENTS

1. INTRODUCTION OF DIGITAL MARKETING 6 Hrs

1.1 What is digital marketing in today's World

1.2 Evolution of Digital Marketing: A Brief Timeline

1.3 Paths of digital marketing: From Awareness to Loyalty

1.4 Key Digital Platforms

1.5 The 4P, 4C, and 4R Models: A Short Overview

1.6 STP Framework: Segmentation, Targeting, and Positioning

2. CONTENT & AIGC MARKETING 8 hrs

2.1 Content Types

2.2 AI-Generated Content (AIGC)

2.3 SEO-Friendly Content Creation

2.4 Personalization and Storytelling in Digital Marketing

2.5 Content Distribution Channels

2.6 Future Trends in Content Marketing

3. SOCIAL MEDIA & INFLUENCER MARKETING 6 Hrs

3.1 Social Media Platform Strategies

3.2 Influencer Selection and Campaign Management

3.3 Social Media Scheduling Tools

3.4 Measuring Engagement and Return on Investment (ROI)

4. DIGITAL ADVERTISING MARKETING 16 Hrs

4.1 Types of digital media and their communication characteristics

4.2 Development trends of digital advertising

4.3 Digital advertising marketing channels

4.4 Digital advertising marketing mindset

4.5 Search engine advertising marketing principles

4.6 Search engine advertising placement process

4.7 Recommendation engine advertising marketing principles

4.8 Recommendation engine advertising placement process

5. DIGITAL INTERACTIVE MARKETING 16 Hrs

5.1 Overview of digital interactive marketing

5.2 Customer life-cycle management

5.3 Customer data analysis indicators

5.4 Customer segmentation methods

5.5 Methods of digital interactive marketing

5.6 Digital Interactive tools

5.7 Channels of digital interactive marketing

5.8 Implementation of digital interactive marketing

6. DIGITALMARKETING PERFORMANCE ANALYSIS AND OPTIMIZATION 8 Hrs

6.1 Evaluation indicators for digital marketing performance

6.2 Methods of digital marketing data acquisition

6.3 Methods of digital marketing data analysis

6.4 Optimization of digital marketing performance

7. DIGITAL ETHICS, PRIVACY & FUTURE TRENDS 4 Hrs

7.1 GDPR, Cookie Policies, and Ethical Data Collection

7.2 Responsible Use of AI in Digital Marketing

7.3 Digital Well-being and Screen Time Management

7.4 Emerging Technologies in Digital Marketing

7.5 Career Paths and Opportunities in Digital Marketing

Recommended textbooks:

A. Digital Marketing Strategy: An Integrated Approach to Online Marketing – Simon Kingsnorth (2022, 3rd Edition)

B. The New Rules of Marketing and PR – David Meerman Scott (2024, 9th Edition)

C. Epic Content Marketing – Joe Pulizzi (2023, Updated Edition)

D. Influence: The Psychology of Persuasion – Robert Cialdini (2021, Revised Edition)

MDT-122 FUNDAMENTALS OF DIGITAL MARKETING

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE BASICS OF DIGITAL MARKETING

1.1 Understand the concept of digital marketing and its role in today's business environment

1.2 Explain the evolution of digital marketing through a brief historical timeline

1.3 Illustrate the stages of the customer journey from awareness to loyalty

1.4 Identify key digital marketing platforms

1.5 Explain the 4P, 4C, and 4R models as foundational marketing frameworks

1.6 Understand the STP process of segmentation, targeting, and positioning in digital marketing

2. MASTER THE CORE THEORIES AND PRACTICAL SKILLS OF DIGITAL CONTENT MARKETING

2.1 Identify various content types

2.2 Understand the role of AI-generated content (AIGC) tools like ChatGPT

2.3 Apply techniques for creating SEO-friendly content

2.4 Explain the importance of personalization and storytelling in digital marketing content

2.5 Explore key distribution channels including social media, email, and web

2.5 Recognize future content trends

3. SOCIAL MEDIA & INFLUENCER MARKETING

3.1 Explain platform-specific strategies

3.2 Understand influencer selection and effective campaign management

3.3 Demonstrate the use of social media scheduling tools

3.4 Measure social media engagement and return on investment (ROI)

4. DIGITAL ADVERTISING MARKETING

4.1 Understand the characteristics of digital media communication

4.2 Familiarize yourself with digital advertising marketing mindset

4.3 Familiarize yourself with the classification and characteristics of digital advertising marketing channels

4.4 Master the principles of search engine advertising marketing

4.5 Master the principles of recommendation engine advertising marketing

4.6 Able to master the process of search engine advertising placement

4.7 Able to master the process of recommendation engine advertising placement

5. DIGITAL INTERACTIVE MARKETING

5.1 Understand the meaning of digital interactive marketing

5.2 Familiarize yourself with the indicators of customer data analysis

5.3 Familiarize yourself with the methods of digital interactive marketing

5.4 Master the methods of customer segmentation

5.5 Able to acquire customer data through various channels

5.6 Able to analyze the process of implementing digital interactive marketing

5.7 Identify interactive tools in digital marketing

5.8 Explain the different channels of digital interactive marketing.

5.9 Demonstrate the implementation of digital interactive marketing strategies.

6. DIGITAL MARKETING PERFORMANCE ANALYSIS AND OPTIMIZATION

6.1 Understand the channels for obtaining evaluation data

6.2 Familiarize yourself with the ideas for optimizing marketing performance

6.3 Master the evaluation indicators for marketing performance

6.4 Master the methods of marketing performance analysis

6.5 Able to optimize digital marketing performance

7. DIGITAL ETHICS, PRIVACY & FUTURE TRENDS

7.1 Understand GDPR, cookie policies, and ethical data collection practices.

7.2 Explain principles of responsible AI usage in digital marketing.

7.3 Recognize the importance of digital well-being and managing screen time.

7.4 Explore emerging technologies such as voice search, AR, and VR.

7.5 Identify potential career paths in the field of digital marketing.

MDT-132 FUNDAMENTALS OF MANAGEMENT

Total Contact Hours	**T**	**P**	**C**
Theory 64Hrs	**2**	**0**	**2**

AIMS: Through systematic learning, students should gain a comprehensive understanding of basic concepts such as management, managers, and the management environment. In order to develop a methodical management mentality and practical abilities, student should gain theoretical understanding in fundamental management functions including "planning," "leading," "organizing," and "controlling." This will provide a strong basis for management practices in the future.

COURSE CONTENTS:

1. OVERVIEW OF MANAGEMENT 5 Hrs

1.1 Basic concept of management

1.2 Responsibilities of managers

1.3 Management activities

1.4 Objects of management

1.5 Functions of Management

2. MANAGEMENT ENVIRONMENT 4 Hrs

2.1 Overview of the management environment

2.2 Analysis of the external management environment

2.3 Analysis of the internal management environment

3. DECISION-MAKING 5 Hrs

3.1 Types of decision-making

3.2 Process of scientific decision-making

3.3 Decision-making methods

3.4 Decision-making skills

3.5 Decision-making in groups

4. GOAL SETTING AND OBJECTIVES 6 Hrs

4.1 Overview of goals and Objectives

4.2 The importance of goal setting

4.3 Types of goals

4.4 Responsibilities of Setting Goals

4.5 Goal Setting Techniques

4.6 Barriers to Goal Setting

5. PLANNING 10Hrs

5.1 Meaning & contents of planning

5.2 The role of planning (Nature and importance of planning)

5.3 Types of planning

5.4 Limitation of Planning

5.5 The process of making plans

5.6 Methods of planning

5.7 Feasibility assessment of planning

5.8 Why Managers fail in Planning

6. LEADING **12 Hrs**

6.1 Introduction to leading

6.2 Leading vs. Managing

6.3 Meaning and role of leadership

6.4 Characteristics of good leader

6.5 Concept of personality and aspects of personality

6.6 Leadership Styles

6.7 Leadership theories

6.8 Motivating and Motivational Theories

6.9 Rewarding Employees

7. ORGANIZING **12 Hrs**

7.1 Concepts of organization

7.2 The classification of organizational structure

7.3 Principles of organizational structure design

7.4 Steps in organizational structure design

7.5 Methods of organizational structure design

7.6 Organizational culture

7.7 Organizational change

8. CONTROLLING **10 Hrs**

8.1 Meaning & Importance of Controlling

8.2 Types and methods of control

8.3 Basic techniques of controlling

8.4 Principles of controlling

8.5 Basic processes of controlling

8.6 Advantages & Limitations of Controlling

RECOMMENDED BOOKS

A. Fundamentals of Management, 8th Edition, Ricky W. Griffin.

B. Fundamentals of Management, 11th Edition, Stephen P. Robbins, Mary Coulter & David Decenzo

C. Management, 15th Edition S. P. Robbins & M. Coulter

MDT-132 FUNDAMENTALS OF MANAGEMENT

INSTRUCTIONAL OBJECTIVE:

1. OVERVIEW OF MANAGEMENT

1.1 Interpret the basic concepts of management

1.2 Identify responsibilities of managers

1.3 Explain the scope of management activities

1.4 Recognize objects of management

1.5 Identify the four basic function of Management

2. MANAGEMENT ENVIRONMENT

2.1 Interpret the overview of the management environment

2.2 Identify Master the methods of analyzing the external management environment

2.3 Identify Familiarize yourself with the methods of analyzing the internal management environment

3. DECISION MAKING

3.1 Interpret the meaning and types of decision-making

3.2 Explain the process of scientific decision-making

3.3 Elaborate decision-making methods

3.4 Describe responsibilities of Setting Goals

3.5 Explain the application of decision-making skills

3.6 Interpret decision in groups and advantages and dis advantages of decision making in groups

4. GOAL SETTING AND OBJECTIVES

4.1 Interpret the basic concept and objectives of goal setting

4.2 Define goal setting within a management context and explain its strategic significance.

4.3 Identify and describe the main types of goals in management (strategic, tactical, operational, and individual).

4.4 Explain how responsibility for goal setting differs across organizational levels

4.5 Explain the principles of goal setting

4.6 Define barriers to goal setting and explain why they arise in management contexts.

Also 4.7 Differentiate between internal barriers (e.g. employee motivation, skill gaps) and external barriers (e.g. market volatility, competition).

5. PLANNING

5.1 Define planning and explain its significance as a core function of management. The role of planning (Nature and importance of planning)

5.2 Describe different types of planning

5.3 Define the concept of planning limitations and explain why they exist in management practice.

5.4 Interpret the planning process and explain its role in achieving organizational objectives

5.5 Explain methods of planning and explain their relevance to managerial practice.

5.6 Define feasibility assessment and explain its role in the planning process and also Identify key factors that determine the feasibility of a plan

5.7 Explain the typical reasons why management planning fails and identify major internal & external factors causes of planning failure in management.

5.8 Explain the levels and types of strategic planning

6. LEADING

6.1 Interpret the essence of leadership and explain the difference between leadership and management

6.2 Explain the role of leadership

6.3 Explain leadership styles role in effective management and also describe major leadership styles

6.4 Describe the different leadership theories

6.5 Interpret the application of motivation theories

6.6 Familiarize yourself with the conditions and methods of communication

6.7 Leadership theories

6.8 Define motivation and explain its importance in employee performance and organizational success and identify key motivational theories

6.9 Describe various employee reward systems (financial and non-financial) and their role in motivation.

7. ORGANIZING

7.1 Define Organizing and explain its role as one of the core management function

7.2 Understand the concept of organization

7.3 Explain Familiarize yourself with the classification of organizational structures

7.4 Interpret Understand the principles of organizational structure design

7.5 Describe the steps of designing organizational structures

7.6 Explain different Familiarize yourself with methods of designing organizational structures

7.7 Explain Understand the role of organizational culture

7.8 Interpret Understand the concept of organizational change

8. CONTROLLING

8.1 Define controlling as a core function of management and explain the purpose of controlling in ensuring goal achievement.

8.2 Explain the prerequisites for control

8.3 Identify and describe the main types of control

8.4 Define controlling techniques and explain their role in monitoring organizational performance. Explain modern techniques of control such as Management by Objectives (MBO), 8.5 Total Quality Management (TQM) and benchmarking.

8.6 Interpret the basic principles of control

8.7 Elaborate the basic processes of control

8.8 Discuss major advantages and limitations to recommend effective controlling practices in different organizational contexts.

MDT-142 FASHION RETAIL MANAGEMENT

Total Contact Hours	**T**	**P**	**C**
Theory 64 Hours	**2**	**0**	**2**

AIMS: This course aims to help students master the basic theories and practical skills in the field of fashion retail management. By studying topics such as basic product knowledge, an overview of fashion consumer goods, brand creation and management, product design and innovation, consumer behavior analysis, marketing, and retail management, students will understand the characteristics and development trends of the fashion retail market. They will also master basic methods of brand management and product design, and develop the ability to analyze consumer demands, formulate marketing strategies, and manage retail operations. The course will also help students provide solutions to practical problems in the fashion retail industry and apply relevant knowledge for market decision-making.

COURSE CONTENTS

1. BASIC PRODUCT KNOWLEDGE 10 Hrs

1.1 The definition and classification of products
1.2 Product quality and quality management
1.3 Product standards and standardization
1.4 Product packaging and labeling
1.5 Product coding and classification
1.6 Product inspection and sampling
1.7 Relationship between products and fashion consumer goods

2. OVERVIEW OF FASHION CONSUMER GOODS 8 Hrs

2.1 Basic concepts and characteristics of fashion consumer goods
2.2 Market characteristics of fashion consumer goods
2.3 Origin and early development of fashion consumption
2.4 Types of market consumer goods
2.5 Market trends and development of fashion consumer goods

3. FASHION BRAND CREATION AND MANAGEMENT 8 Hrs

3.1 Concept and importance of brand positioning
3.2 Brand image building
3.3 Brand maintenance and enhancement
3.4 Operation models of luxury brands and fast fashion brands

4. FASHION CONSUMER GOODS DESIGN AND INNOVATION 12 Hrs

4.1 Innovative concepts in fashion consumer goods design
4.2 Generation of inspiration for fashion consumer goods
4.3 Principles of fashion consumer goods design

4.4 Integration of new technologies in fashion consumer goods

4.5 Integration of fashion consumer goods with culture

4.6 Integration of fashion consumer goods with aesthetics

4.7 Packaging of fashion consumer goods

5. CONSUMER BEHAVIOR AND FASHION CONSUMER GOODS 6 Hrs

5.1 Demand and purchasing motivation for fashion consumer goods

5.2 Analysis of decision-making process for fashion consumer goods

5.3 Brand loyalty and consumer perception of fashion consumer goods

5.4 Psychological factors influencing the purchase of fashion consumer goods

6. MARKETING THEORY FOR FASHION CONSUMER GOODS 12 Hrs

6.1 Market positioning and differentiated competition

6.2 Product strategy for fashion consumer goods

6.3 Pricing strategy for fashion consumer goods

6.4 Channel management and retail strategy for fashion consumer goods

6.5 Advertising and promotion strategy applications for fashion consumer goods

6.6 Global marketing of fashion consumer goods

7. FASHION CONSUMER GOODS RETAIL AND DISPLAY MANAGEMENT 8 Hrs

7.1 Business models of fashion retail

7.2 Retail channels and sales strategies in fashion

7.3 Fashion retail store location selection

7.4 Product display and promotional techniques for fashion consumers

7.5 Integration of physical and online stores for fashion consumer goods

7.6 Retail management and customer relationship maintenance for fashion consumer goods

Recommended textbooks:

A. Resurrecting Retail: The Future of Business in a Post-Pandemic World – Doug Stephens (2021) Shopify Wikipedia

B. Remarkable Retail: How to Win & Keep Customers in the Age of Digital Disruption – Steve Dennis (2023) Shopify

C. Why We Buy: The Science of Shopping—Updated and Revised for the Internet, the Global Consumer, and Beyond – Paco Underhill (updated edition, circa 2023) ShopifyLoyal Guru

D. Luxury Fashion Retail Management – Tsan-Ming Choi & Bin Shen (2016)

MDT-142 FASHION RETAIL MANAGEMENT

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND BASIC PRODUCT KNOWLEDGE

1.1 Understand the definition and classification of products

1.2 Master the basic concepts of product quality and quality management

1.3 Familiarize yourself with product standards and standardization

1.4 Understand the role and requirements of product packaging and labeling

1.5 Familiarize yourself with product coding and classification methods and applications

1.6 Understand the basic process of product inspection and sampling

1.7 Understand the relationship between products and fashion consumer goods

2. UNDERSTAND THE OVERVIEW OF FASHION CONSUMER GOODS

2.1 Understand the basic concepts and characteristics of fashion consumer goods

2.2 Familiarize yourself with the market characteristics of fashion consumer goods

2.3 Understand the origin and early development of fashion consumption

2.4 Understand the types of market consumer goods

2.5 Understand the market trends and developments of fashion consumer goods

3. MASTER THE CORE THEORIES OF FASHION BRAND CREATION AND MANAGEMENT

3.1 Understand the concept and importance of brand positioning

3.2 Master the methods of brand image building

3.3 Familiarize yourself with strategies for brand maintenance and enhancement

3.4 Understand the operational models of luxury brands and fast fashion brands

4. MASTER THE CORE PRINCIPLES OF FASHION CONSUMER GOODS DESIGN AND INNOVATION

4.1 Understand the innovative concepts in fashion consumer goods design

4.2 Understand the process of generating inspiration for fashion consumer goods

4.3 Master the basic principles of fashion consumer goods design

4.4 Understand the integration of new technologies in fashion consumer goods

4.5 Understand the innovative integration of fashion consumer goods with culture

4.6 Understand the innovative integration of fashion consumer goods with aesthetics

4.7 Familiarize yourself with the packaging design requirements for fashion consumer goods

5. UNDERSTAND THE RELATIONSHIP BETWEEN CONSUMER BEHAVIOR AND FASHION CONSUMER GOODS

5.1 Understand the demand and purchasing motivations for fashion consumer goods

5.2 Understand the decision-making process for fashion consumer goods

5.3 Familiarize yourself with brand loyalty and consumer perception of fashion consumer goods

5.4 Understand the psychological factors influencing the purchase of fashion consumer goods

6. MASTER THE APPLICATION OF FASHION CONSUMER GOODS MARKETING THEORY

6.1 Understand the basic concepts of market positioning and differentiated competition

6.2 Master the product strategy for fashion consumer goods

6.3 Understand the pricing strategy for fashion consumer goods

6.4 Familiarize yourself with channel management and retail strategies for fashion consumer goods

6.5 Understand the application of advertising and promotional strategies for fashion consumer goods

6.6 Understand the globalization marketing of fashion consumer goods

7. MASTER THE RETAIL AND DISPLAY MANAGEMENT OF FASHION CONSUMER GOODS

7.1 Understand the business models of fashion retail

7.2 Master the channels and sales strategies for fashion retail

7.3 Understand the key factors for selecting locations for fashion retail stores

7.4 Familiarize yourself with product display and promotional techniques for fashion consumers

7.5 Understand the integration of offline stores and online stores for fashion consumer goods

7.6 Understand the retail management and customer relationship maintenance for fashion consumer goods

MDT-152 DEMAND INSIGHTS

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**1**	**3**	**2**

AIMS: This course aims to equip students with core theories and practical skills in demand insights, enhancing their abilities in market research, consumer analysis, industry demand research and analysis, and market trend forecasting, etc. Through hands-on exercises and case studies, students will learn to apply demand insight techniques to identify market trends, analyze consumer demand, and provide data support for product planning, market positioning, pricing strategies, and marketing decisions. The course is designed to enable students to effectively utilize demand insights in real-world scenarios, driving product innovation, optimizing market strategies, and enhancing the company's market competitiveness.

COURSE CONTENTS

1. DEMAND INSIGHT OVERVIEW 4 Hrs

1.1 Definition and importance of demand insight
1.2 Disciplinary foundations of demand insight
1.3 AI's role in demand insight
1.4 Application areas of demand insight B2B, B2C and eCommerce
1.5 Emerging technologies and methods in demand insight

2. MARKET RESEARCH METHODS AND TOOLS 4 Hrs

2.1 Basic theories of market research (Primary vs Secondary Research)
2.2 Qualitative research methods
2.3 Quantitative research methods
2.4 Data analysis and interpretation
2.5 Data visualization techniques

3. INDUSTRY DEMAND RESEARCH AND ANALYSIS 4 Hrs

3.1 Definition and characteristics of an industry
3.2 Industry participants and ecosystem
3.3 Industry trends and forecasting
3.4 Macro environmental analysis and models
3.5 Industry competitor analysis with digital benchmarking tools

4. MARKET TRENDS AND DEMAND FORECASTING 4 Hrs

4.1 Defining target markets
4.2 Segmentation and positioning of target markets
4.3 Identifying and analyzing market trends

4.4 Market size and growth forecasting

5. CONSUMER DEMAND ANALYSIS 6 Hrs

5.1 Methods for finding online customers

5.2 Methods for finding offline customers

5.3 Defining consumer groups

5.4 Theoretical models of consumer demand

5.5 Analyzing the consumer decision-making process

5.6 Levels and classifications of consumer demand

5.7 Emerging trends in customer expectations

6. Product & Feature Research 4 Hrs

6.1 Product feature analysis

6.2 Product specification analysis

6.3 Market applicability analysis of products

7. Demand-Driven Marketing Decisions 6 Hrs

7.1 Demand insight and product planning

7.2 Demand insight and market segmentation

7.3 Demand insight and pricing strategies

7.4 Demand insight and market positioning

7.5 Demand insight and service optimization

7.6 Demand insight and marketing communication strategies

Recommended textbooks

A. Demand Forecasting Best Practices – Nicolas Vandeput (2023) Manning PublicationsO'Reilly Media

B. Demand Forecasting for Executives and Professionals – Stephan Kolassa, Bahman Rostami-Tabar, & Enno Siemsen (2023) Medium

C. Sales Forecasting Management: A Demand Management Approach – John T. Mentzer & Mark A. Moon (2004 edition) BookAuthorityWikipedia

D. Forecasting: Methods and Applications – Spyros Makridakis, Steven Wheelwright & Rob J. Hyndman (3rd edition, year not specified on page but widely used)

MDT-152 DEMAND INSIGHTS

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE BASIC CONCEPTS AND APPLICATIONS OF DEMAND INSIGHT

1.1 Understand the definition and importance of demand insight

1.2 Comprehend the disciplinary foundations of demand insight

1.3 Understand ethical, technological, and professional aspects of digital marketing, including data privacy (GDPR, cookies), responsible AI usage, digital well-being, emerging technologies (voice, AR/VR, Web 3.0), and potential career paths

1.4 Understand the application areas of demand insight

1.5 Familiarize yourself with emerging technologies and methods in demand insight

2. MASTER THE APPLICATIONS OF MARKET RESEARCH METHODS AND TOOLS

2.1 Differentiate between primary and secondary market research methods

2.2 Explain qualitative research techniques such as online focus groups

2.3 Apply quantitative research methods using tools like Type form

2.4 Comprehend the basic methods of data analysis and interpretation

2.5 Understand the application of data visualization techniques

3. MASTER THE METHODS OF INDUSTRY DEMAND RESEARCH AND ANALYSIS

3.1 Understand the definition and characteristics of an industry

3.2 Familiarize yourself with the composition of industry participants and ecosystems

3.3 Master the methods of industry trend forecasting and prediction

3.4 Comprehend macro-environmental analysis and analysis models

3.5 Understand the methods of industry competitor analysis with digital benchmarking tools

4. MASTER THE BASIC METHODS OF MARKET TRENDS AND DEMAND FORECASTING

4.1 Understand the definition of target markets

4.2 Comprehend the methods of market segmentation and positioning

4.3 Master the methods of identifying and analyzing market trends

4.4 Comprehend the basic methods of market size and growth forecasting

5. UNDERSTAND THE CORE THEORIES AND METHODS OF CONSUMER DEMAND ANALYSIS

5.1 Familiarize yourself with methods of finding online customers

5.2 Comprehend methods of finding offline customers

5.3 Understand the definition of consumer groups

5.4 Master theoretical models of consumer demand

5.5 Comprehend consumer decision-making process analysis

5.6 Understand the levels and classifications of consumer demand

5.7 Identify emerging trends in customer expectations such as personalization and instant delivery

6. Product & Feature Research

6.1 Understand methods of product feature analysis

6.2 Comprehend methods of product specification analysis

6.3 Master the analysis of product market applicability

6.4 Explain the use of feedback platforms for collecting customer insights

7. Demand-Driven Marketing Decisions

7.1 Comprehend the relationship between demand insight and product planning

7.2 Master the application of demand insight in market segmentation

7.3 Comprehend the role of demand insight in pricing strategies

7.4 Master the application of demand insight in market positioning

7.5 Comprehend the role of demand insight in service optimization

7.6 Master the application of demand insight in marketing communication strategies

MDT-152 DEMAND INSIGHTS

LIST OF PRACTICALS 96 Hrs

1. Explain the core role of demand insight in market research and analyze real-world case studies to understand its impact across industries.
2. Research and describe the characteristics and key features of a selected industry to summarize its structure and operations.
3. Map and analyze key participants in an industry and illustrate their interrelationships using a diagram or chart.
4. Apply forecasting techniques to predict future trends in a chosen industry and justify projections with data.
5. Use the PESTEL framework to analyze macro-environmental factors influencing a specific industry.
6. Conduct a competitor analysis to identify major competitors and compare their market strengths and weaknesses.
7. Define and analyze the target market within a segmented industry and summarize customer characteristics.
8. Segment a target market based on demographics, behavior, or geography and determine an appropriate market position.
9. Use online trend analysis tools (e.g., Google Trends, Statista) to identify and visualize current market trends.
10. Calculate and forecast market size and growth potential using historical and projected industry data.
11. Practice online customer identification using digital tools to locate and categorize potential customers.
12. Conduct offline customer identification activities (e.g., surveys, field visits) to map potential local customers.
13. Develop detailed consumer profiles by analyzing demographics, purchase behavior, and preferences.
14. Design and distribute a survey questionnaire to collect consumer demand data from a target market.
15. Plan and conduct a focus group interview to gather qualitative insights on customer feedback.
16. Conduct a customer satisfaction survey, analyze quantitative data, and interpret key improvement areas.
17. Design a brand loyalty survey and evaluate consumer loyalty levels using statistical methods.
18. Conduct a consumer behavior analysis to identify key purchase motivations and decision triggers.

19. Analyze social media interactions using analytics tools to identify consumer preferences and emerging trends.
20. Study and outline the decision-making process of a consumer group through a decision journey map.
21. Categorize consumer demand levels into primary, selective, and latent demand to illustrate demand hierarchy.
22. Forecast future changes in consumer demand trends based on historical and behavioral data patterns.
23. Examine and describe a product's key features and specifications to understand its market potential.
24. Compare multiple products in the same category to evaluate differences in performance, price, and value.
25. Assess the market applicability of a selected product across different geographic or demographic markets.
26. Plan and execute a product trial activity, collect user feedback, and summarize findings in a report.
27. Conduct site visits to at least three industries, gather operational and market data, and prepare a comprehensive report on key findings and insights.

MDT-163 CONSUMER BEHAVIOR ANALYSIS

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**2**	**3**	**3**

AIMS: Through this course, students will master the consumer behavior, and instead focus on advanced concepts such as Customer Lifetime Value (CLV), RFM analysis, churn prediction, and cohort studies. They will understand the consumer purchase decision process, but also gain skills in sentiment analysis across digital platforms and Omni channel journey mapping (e.g., search → WhatsApp → store). Students will be able to analyze and predict consumer purchasing behavior, social commerce adoption, channel switching, subscription models, referrals, online reviews, and return behaviors. The course aims to equip students with the ability to use consumer behavior analysis tools, enabling them to provide data support and strategic insights for enterprises in marketing decisions related to product strategies, pricing, channel selection, and promotional activities, and instead emphasize digital engagement strategies and customer retention in the modern marketplace.

COURSE CONTENTS

1. CONSUMERS AND CONSUMER BEHAVIOR 8 Hrs

1.1 Concept and classification of consumers
1.2 Concept and characteristics of consumer behavior
1.3 Consumer behavior theories
1.4 Influencing factors of consumer behavior
1.5 Research methods and trends in consumer behavior
1.6 Significance of consumer behavior research
1.7 Consumer behavior analysis models
1.8 Methods of consumer behavior analysis
1.9 Cutting-edge techniques in consumer behavior analysis
2.0 CLV, RFM, churn, cohort, sentiment analysis

2. CONSUMER BEHAVIOR PURCHASE DECISION 8 Hrs

2.1 Consumer purchase decision process
2.2 Consumer purchase decision content
2.3 Principles followed in consumer purchase decisions
2.4 Types of consumer purchase decisions
2.5 Omnichannel journey mapping (e.g. search → WhatsApp → store)

3. EXTERNAL INFLUENCING FACTORS OF CONSUMER BEHAVIOR 4 Hrs

3.1 Analysis of the influence of culture and values
3.2 Analysis of the influence of social class and social groups

3.3 Analysis of the influence of family

3.4 Analysis of the influence of consumption context

3.5 Impact of social commerce and channel switching

4. INTERNAL INFLUENCING FACTORS OF CONSUMER BEHAVIOR 4 Hrs

4.1 Motivation and needs theory

4.2 Perception and learning process

4.3 Attitudes and beliefs

4.4 Personality and lifestyle

5. PRODUCT STRATEGY AND CONSUMER BEHAVIOR 4 Hrs

5.1 Product name and consumer perception

5.2 Product packaging and consumer perception

5.3 Product brand and consumer perception

5.4 Product quality and consumer satisfaction

5.5 Product innovation and consumer acceptance

6. PRODUCT PRICE AND CONSUMER BEHAVIOR 4 Hrs

6.1 Price Elasticity and consumer demand

6.2 Price positioning and consumer psychology

6.3 Price strategy's impact on different consumer groups

7. CHANNELS AND CONSUMER BEHAVIOR 4 Hrs

7.1 Impact of online and offline channels on consumer behavior

7.2 Determining factors for channel selection

7.3 Multi-channel strategy and consumer experience

8. PROMOTION AND CONSUMER BEHAVIOR 4 Hrs

8.1 Impact of promotional strategies on consumer behavior

8.2 Marketing communication and consumer decision

8.3 Impact of advertising on consumer behavior

8.4 Evaluation of promotion campaign effectiveness

9. CONSUMER PURCHASE BEHAVIOR ANALYSIS 8 Hrs

9.1 Analysis of consumer information search behavior

9.2 Analysis of consumer purchase preference

9.3 Analysis of consumer purchase path

9.4 Analysis of consumer transaction behavior

9.5 Diagnosis of abnormal consumer purchase behavior

10. CONSUMER POST-PURCHASE RESPONSE 8 Hrs

10.1 Product use and disposal

10.2 Analysis of consumer post-purchase evaluation behavior

10.3 Analysis of consumer satisfaction

10.4 Analysis of consumer loyalty

10.5 Analysis of consumer repurchase

10.6 Subscription, referrals, reviews, return behavior

10.7 Prediction of consumer post-purchase behavior

11. CONSUMER PROFILES ANALYSIS **8 Hrs**

11.1 Types of consumer profiles

11.2 Consumer profile tagging

11.3 Establishing and visualizing consumer profiles

11.4 Methods of consumer profile analysis

11.5 Dimensions of consumer profile analysis

MDT-163 CONSUMER BEHAVIOR ANALYSIS

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE BASIC CONCEPTS AND RESEARCH METHODS OF CONSUMER BEHAVIOR

1.1 Understand the concept and classification of consumers

1.2 Understand the concept and characteristics of consumer behavior

1.3 Understand consumer behavior theory

1.4 Understand the influencing factors of consumer behavior

1.5 Master the research methods and trends in consumer behavior

1.6 Understand the significance of consumer behavior research

1.7 Familiarize yourself with consumption behavior analysis models

1.8 Master the methods of behavior analysis

1.9 Understand cutting-edge techniques in consumer behavior analysis

2. UNDERSTAND THE CONSUMER DECISION-MAKING PROCESS AND DECISION TYPES

2.1 Understand the consumer decision-making process

2.2 Master the content of consumer purchase decisions

2.3 Understand the principles followed by consumer purchase decisions

2.4 Understand the types of consumer purchase decisions

3. ANALYZE EXTERNAL INFLUENCES ON CONSUMER BEHAVIOR

3.1 Understand the impact of culture and values on consumer behavior

3.2 Analyze the impact of social class and social groups on consumer behavior

3.3 Understand the influence of family on consumer behavior

3.4 Master the impact of consumption situations on consumer behavior

4. ANALYZE INTERNAL INFLUENCES ON CONSUMER BEHAVIOR

4.1 Understand the impact of motivation and needs theory on consumer behavior

4.2 Master the impact of perception and learning processes on consumer behavior

4.3 Understand the impact of attitudes and beliefs on consumer behavior

4.4 Understand the impact of personality and lifestyle on consumer behavior

5. UNDERSTAND THE RELATIONSHIP BETWEEN PRODUCT STRATEGY AND CONSUMER BEHAVIOR

5.1 Analyze the impact of product naming on consumer perception

5.2 Understand the influence of product packaging on consumer perception

5.3 Understand the influence of product branding on consumer perception

5.4 Understand the relationship between product quality and consumer satisfaction

5.5 Master the impact of product innovation on consumer acceptance

6. ANALYZE THE RELATIONSHIP BETWEEN PRODUCT PRICE AND CONSUMER BEHAVIOR

6.1 Understand the relationship between price elasticity and consumer demand

6.2 Master the relationship between price positioning and consumer psychology

6.3 Analyze the impact of price strategies on different consumer groups

7. UNDERSTAND THE RELATIONSHIP BETWEEN CHANNELS AND CONSUMER BEHAVIOR

7.1 Analyze the impact of e-commerce platforms on consumer behavior

7.2 Understand the influence of social commerce and channel switching on consumer experience

8. ANALYZE THE IMPACT OF PROMOTIONS ON CONSUMER BEHAVIOR

8.1 Understand the impact of promotion strategies on consumer behavior

8.2 Understand the relationship between marketing communication and consumer decision-making

8.3 Analyze the impact of advertising on consumer behavior

8.4 Master the methods for evaluating promotion activity effectiveness

9. MASTER CONSUMER PURCHASE BEHAVIOR ANALYSIS SKILLS

9.1 Analyze consumer information acquisition behaviors

9.2 Master methods for analyzing consumer purchase preferences

9.3 Understand the analysis methods of consumer purchase paths

9.4 Master methods for analyzing consumer transaction behavior

9.5 Understand the diagnostic methods for abnormal consumer purchase behaviors

9.6 Master Customer Lifetime Value (CLV), RFM analysis, churn prediction, and cohort studies

9.7 Apply sentiment analysis to evaluate consumer emotions across digital platforms

10. UNDERSTAND CONSUMER POST-PURCHASE RESPONSES AND SATISFACTION ANALYSIS

10.1 Master the analysis of consumer product usage and disposal behaviors

10.2 Analyze consumer post-purchase evaluation behaviors

10.3 Understand methods of consumer satisfaction analysis

10.4 Understand methods of consumer loyalty analysis

10.5 Master the analysis of consumer repurchase behaviors

10.6 Understand techniques for predicting consumer post-purchase behavior

10.7 Understand the role of subscription models, referrals, online reviews, and return behaviors in post-purchase engagement

11. MASTER CONSUMER PROFILE ANALYSIS METHODS AND APPLICATIONS

11.1 Understand the types of consumer profiles

11.2 Familiarize yourself with the design and application of consumer profile tags

11.3 Master the creation and visualization of consumer profiles

11.4 Understand methods of consumer profile analysis

11.5 Master the dimensions and applications of consumer profile analysis

MDT-163 CONSUMER BEHAVIOR ANALYSIS

LIST OF PRACTICALS 96 Hrs

1. Collect and record detailed consumer purchase data and draw a visual behavior pattern diagram.
2. Organize and conduct role-playing exercises where students act as consumers and document decision-making steps.
3. Gather, compare, and annotate international brand advertisements, then create a graphical report showing cultural influences.
4. Observe and note step-by-step changes in consumer decisions in different social scenarios.
5. Simulate family purchase discussions, document different viewpoints, and analyze influence on buying decisions.
6. Analyze consumer datasets from multiple situations and summarize situational effects on purchases.
7. Evaluate market demand fluctuations and record effects on consumer behavior.
8. Examine cultural differences and measure their influence on consumer preferences.
9. Investigate consumption scenarios (e.g., online vs offline) and document their impact on buying choices.
10. Design and conduct surveys or structured interviews, collect responses, and analyze consumption motivations.
11. Perform blind product testing, record perception changes, and link observations to brand perception.
12. Use simulated events or advertisements to influence peers, then document attitude changes toward the product.
13. Create personal lifestyle and personality profiles, compare with peers, and analyze influence on purchase behavior.
14. Conduct packaging tests, observe consumer reactions to design elements, and propose improvements.
15. Analyze responses to packaging and determine its effect on purchase likelihood.
16. Facilitate group discussions on brand perceptions, document opinions, and summarize key insights.
17. Assess product quality through hands-on evaluation and record satisfaction levels.
18. Collect and analyze satisfaction survey data, then present actionable insights.
19. Simulate pricing scenarios, observe demand changes, and document consumer price sensitivity.
20. Analyze product strategy (features, design, positioning) and assess effects on consumer decisions.
21. Examine pricing strategies (discounts, premium) and measure influence on purchases.
22. Study brand preferences, record trends, and analyze patterns using collected data.
23. Track consumer choices during purchases and document influencing factors.

24. Map the purchase path, note decision points, and identify key influencing factors.
25. Conduct promotional campaigns, record consumer reactions, and evaluate impact on purchases.
26. Measure engagement in promotional activities using participation data and summarize results.
27. Perform online and offline shopping exercises, record experiences, and compare purchase behaviors.
28. Analyze multi-channel sales systems, collect feedback, and determine channel preferences.
29. Review advertising campaigns, identify success factors, and present findings in a structured report.
30. Simulate complete purchase processes, record each decision stage, and analyze influencing factors.
31. Analyze repurchase data, calculate repurchase rates and cycles, and identify behavior trends.
32. Calculate Customer Lifetime Value (CLV) using transaction history and summarize business implications.
33. Segment consumers with RFM analysis, visualize results, and interpret key insights.
34. Perform sentiment analysis on social media and reviews, categorize opinions, and summarize trends.
35. Design an omnichannel journey map, analyze touchpoints, and propose improvements to enhance consumer engagement.

MDT-172 BUSINESS ETIQUETTE AND COMMUNICATION

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**1**	**3**	**2**

AIMS: Through this course, students will master the basic concepts, principles, and application scenarios of business etiquette and communication. The course aims to cultivate students' awareness of etiquette in business settings, enhance their communication skills, and improve their ability to handle complex business affairs.

COURSE CONTENTS

1. BUSINESS ETIQUETTE AND COMMUNICATION AWARENESS 4 Hrs

1.1 The concept of business etiquette
1.2 Importance of business etiquette
1.3 The concept of business communication
1.4 The basic principles of business communication
1.5 Functions of business communication
1.6 Cultural differences in business etiquette and communication

2. BUSINESS APPEARANCE ETIQUETTE 2 Hrs

2.1 Evolving standards of business appearance (inclusive)
2.2 The basic standards of business appearance
2.3 Virtual presence (camera framing, voice tone, posture)
2.4 Online identity: LinkedIn profile, email signatures

3. BUSINESS DRESS ETIQUETTE 4 Hrs

3.1 The basic principles of business dress
3.2 Differences in business attire for men and women
3.3 Business attire guidelines for different occasions
3.4 Cultural differences in business attire

4. BUSINESS MEETING ETIQUETTE 2 Hrs

4.1 The basic process of business meetings
4.2 Handshaking and business card exchange etiquette
4.3 Introduction and self-introduction skills
4.4 Business visits and reception etiquette

5. BUSINESS BANQUET ETIQUETTE 2 Hrs

5.1 Types of business banquets
5.2 Preparation and arrangement methods for business banquets
5.3 Etiquette guidelines for business banquets

6. BUSINESS RECEPTION AND VISITING ETIQUETTE 3 Hrs

6.1 The basic process of business reception
6.2 Etiquette and details in reception

6.3 Important considerations for business visits

6.4 International business reception and visiting etiquette

7. BUSINESS COMMUNICATION SKILLS 5 HRs

7.1 Listening skills

7.2 Oral communication skills

7.3 Written communication skills

7.4 Non-verbal communication skills

7.5 Conflict management and negotiation skills

8. BUSINESS COMMUNICATION SCENARIOS 4 Hrs

8.1 Interpersonal communication

8.2 Organizational communication

8.3 Online communication

8.4 Cross-cultural communication

9. BUSINESS COMMUNICATION AND NEGOTIATION 6 Hrs

9.1 Modern principles of negotiation

9.2 Negotiation skills

9.3 Preparing for negotiation

9.4 Opening negotiation

9.5 Negotiation discussions

9.6 Negotiation closure

9.7 Use of data & tools in negotiation prep (e.g., AI summaries, dashboards)

MDT-172 BUSINESS ETIQUETTE AND COMMUNICATION

INSTRUCTIONAL OBJECTIVE

1. Understand THE BASICS OF BUSINESS ETIQUETTE AND COMMUNICATION

1.1 Understand the concept and importance of business etiquette

1.2 Familiarize yourself with the concept and basic principles of business communication

1.3 Master the basic functions of business communication

1.4 Understand the cultural differences in business etiquette and communication

2. BUSINESS APPEARANCE ETIQUETTE

2.1 Understand the evolving standards of business appearance in modern professional environments

2.2 Master the basic standards of business appearance

2.3 Demonstrate effective virtual presence through proper camera framing, voice tone, and posture

2.4 Develop a professional online identity using LinkedIn profiles and email signatures

3. Understand BUSINESS DRESS ETIQUETTE

3.1 Understand the basic principles of business attire

3.2 Familiarize yourself with the differences in business attire for men and women

3.3 Master the guidelines for choosing business attire for different occasions

3.4 Understand the cultural differences in business attire

4. FAMILIARITY WITH BUSINESS MEETING ETIQUETTE

4.1 Understand the basic process of business meetings

4.2 Familiarize yourself with handshaking and business card exchange etiquette

4.3 Master introduction and self-introduction techniques

4.4 Master business visit and reception etiquette

5. Understand BUSINESS BANQUET ETIQUETTE

5.1 Understand the types of business banquets

5.2 Familiarize yourself with preparation and arrangement methods for business banquets

5.3 Master etiquette guidelines for business banquets

6. FAMILIARITY WITH BUSINESS RECEPTION AND VISIT ETIQUETTE

6.1 Understand the basic process of business reception

6.2 Master etiquette and details in reception

6.3 Understand the key considerations for business visits

6.4 Understand international business reception and visit etiquette

7. MASTER BUSINESS COMMUNICATION SKILLS

7.1 Understand listening skills

7.2 Master oral communication skills

7.3 Familiarize yourself with written communication skills

7.4 Familiarize yourself with non-verbal communication skills

7.5 Master conflict management and negotiation skills

8. FAMILIARITY WITH BUSINESS COMMUNICATION SCENARIOS

8.1 Familiarize yourself with interpersonal communication methods

8.2 Master organizational communication methods

8.3 Understand online communication methods

8.4 Understand cross-cultural communication methods

9. MASTER BUSINESS COMMUNICATION AND NEGOTIATION SKILLS

9.1 Understand the basic concepts of business negotiation

9.1 Understand modern principles and practices of effective negotiation

9.2 Master business negotiation techniques

9.3 Familiarize yourself with business negotiation preparation skills

9.4 Master techniques for opening business negotiations

9.5 Master techniques for business negotiation discussions

9.6 Master techniques for closing business negotiations

9.7 Apply data and digital tools such as AI summaries and dashboards in negotiation preparation

MDT-172 BUSINESS ETIQUETTE AND COMMUNICATION

LIST OF PRACTICALS 96 Hrs

1. Perform a role-playing simulation to demonstrate appropriate greeting etiquette in business scenarios.
2. Analyze and present differences in business etiquette across various cultural backgrounds.
3. Explain the importance of business etiquette and effective communication through examples and discussion.
4. Examine real or hypothetical case studies to identify and explain common communication misunderstandings.
5. Simulate different business communication methods and evaluate their effectiveness in achieving objectives.
6. Design strategies for cross-cultural communication to resolve cultural conflicts and misunderstandings.
7. Assess the appropriateness of personal appearance in diverse business settings through visual evaluation.
8. Demonstrate suitable hairstyle and makeup standards appropriate for professional business environments.
9. Simulate personal image management scenarios and develop a personal image maintenance plan.
10. Compare business appearance standards across multiple cultures and summarize key differences.
11. Develop suitable business dress plans for various professional situations.
12. Assess how gender differences influence business attire expectations and perceptions.
13. Simulate selecting and coordinating business outfits for meetings and formal interactions.
14. Analyze cultural differences in business dress and formulate strategies for appropriate adaptation.
15. Practice and demonstrate the standard procedure for conducting a business meeting.
16. Simulate proper handshaking and business card exchange etiquette in professional settings.
17. Role-play introduction and self-introduction techniques and receive feedback for improvement.
18. Practice etiquette and attention to detail during business visits and receptions.
19. Design and simulate a complete business banquet procedure from preparation to conclusion.
20. Analyze various types of business banquets and their preparation requirements.
21. Simulate proper seating arrangements and etiquette during formal business banquets.
22. Assess how cultural differences affect international business banquet customs and behaviors.
23. Role-play the complete etiquette process involved in a business reception.
24. Demonstrate correct business visit etiquette and attention to detail.
25. Simulate business reception and visit procedures in a cross-cultural context.

26. Evaluate how different business reception processes influence customer experience.
27. Practice effective listening techniques in diverse business scenarios and reflect on feedback received.
28. Simulate oral communication strategies with controlled tone, pace, and volume, and assess effectiveness.
29. Write and evaluate professional business communications following standard formats and tone.
30. Demonstrate non-verbal communication skills and analyze their interpretation across cultures.
31. Role-play business conflict resolution and negotiation situations to evaluate outcomes.
32. Simulate interpersonal communication strategies and assess their effectiveness in real-time feedback.
33. Analyze organizational communication case studies and propose improvements.
34. Practice online communication etiquette and demonstrate professionalism in digital correspondence.
35. Simulate cross-cultural communication scenarios to evaluate understanding and adaptation skills.
36. Analyze and summarize a complete business negotiation case highlighting key tactics and outcomes.
37. Practice business negotiation opening strategies and design effective negotiation plans.
38. Role-play the negotiation process and evaluate its effectiveness based on predefined objectives.
39. Simulate the closing stage of a negotiation, demonstrating appropriate etiquette and communication skills.
40. Assess communication style differences in international business negotiations and present findings.

2nd year

DAE

IN

MARKETING（SPECIALIZATION IN DIGITAL MARKETING)

Gen-201 ISLAMIAT AND PAK STUDIES

CIVIL TECHNOLOGY
YEAR 2

اسلامیات/مطالعہ پاکستان

نصاب سال دوئم GEN201

ٹی	پی	سی
1	0	1

حصہ اول اسلامیات

حصہ دوئم مطالعہ پاکستان

کل وقت 20 گھنٹے:

موضوعات:

1۔ سورۃ المومنون ایک تا گیارہ آیات کا ترجمہ مع تشریح

2۔ دس منتخب احادیث مع ترجمہ وتشریح

() خیر کم من تعلم القرآن و علمه

() لا ایمان لمن لا امانته له ولا دین لا من لا اعهد له

() و یاکم والظن ان الظن اکرب الحدیث

() من احدث فی امرنا هذا ما لیس منه فهورد

() من حمل علینا السلاح فلیس منا

() انا و کافل الیتیم فی الجنه

() لا ضرور ولا ضرار فی السلام

() کلکم راع و کلکم راع و کلکم مسول عن رعیته

3۔ سیرۃ طیبہ

() مکی زندگی۔ولادت۔بعثت۔ہجرت

() مدنی زندگی۔مواخات۔میثاق مدینہ۔فتح مکہ(اسباب ونتائج)

4۔ حضورﷺ بحیثیت

() خطبہ حجۃ الوداع۔انسانی حقوق کا اعلامیہ حقوق انسانی پالیسی 2018

() معلم کامل۔سربراہ خاندان

5۔ اسلامی معاشرہ

نظام تعلیم اوراس کے مقاصد۔عدل وانصاف۔امر بالمعروف۔نہی عن المنکر۔انسانی حقوق کا معاشرتی اور معاشی ترقی میں کردار

جہاد۔کسب حلال۔مسجد(اہمیت وفضیلت)

6۔ اسلامی ریاست کی تعریف۔اسلامی ریاست کی خصوصیات۔اسلامی حکومت کے فرائض۔اسلامی طرز حکومت۔

حقوق آگاہی/معلومات تک رسائی

۔ ملازم پیشہ خواتین کا تحفظ

() اسلامی ریاست کے اغراض ومقاصد بیان کر سکے

() اسلامی ریاست کے قیام کی لیے جدوجہد کر سکے

() حقوق آگاہی رمعلومات تک رسائی کا قانون جان سکے

() ملازمت پیشہ خواتین کے حقوق کا تحفظ جان سکے اور

() معاشرے میں خواتین کے حقوق کا تحفظ یقینی بنائے

نصاب مطالعہ پاکستان

سال دوئم

حصہ دوم

ٹی	پی	سی
1	0	1

کل وقت 12 گھنٹے

موضوعات:

() دوقومی نظریہ

() تحریک پاکستان

() انڈین کانگریس

() مسلم لیگ

() تقسیم بنگال

() میثاق لکھنو

() تحریک خلافت

() سندھو تحریک

() تجاویز دہلی

() نہرو رپورٹ

() قائداعظم کے چودہ نکات

() خطبہ آلہ آباد

() انتخابات 1938 اور انتقال اقتدار

() قرارداد پاکستان

حصہ دوم

مطالعہ پاکستان

تدریس مقاصد:

تحریک پاکستان:

عمومی مقاصد:

() قیام پاکستان کے اسباب وتحریک کو بیان کر سکے

خصوصی مقاصد:

() قومیت کے مفہوم کو بیان کر سکے

() دو قومی نظریہ کی تعریف وتوضیح کر سکے

() دوقومی نظریہ کی اہمیت بیان کر سکے

() ہندوستانی مسلمانوں کی محرومیوں کو بیان کر سکے

() قومی تشخص کو بحال رکھنے کے لیے مسلمانان ہند کی مساعی بیان کر سکے

() آزادی ہند اور قیام پاکستان علامہ اقبال اور قائداعظم کی مساعی بیان کریں

() قیام پاکستان سے مستقبل اسلامی مملکت کے قیام کے لیے مسلم عوام کی کوششوں کو بیان کر سکے

() مسلم لیگ کے قیام پاکستان کے لیے جدو جہد بیان کر سکے

نصاب اخلاقیات

سال دوم

تدریس مقاصد:

طالب علم اخلاقیات کی اہمیت وضرورت سے آگاہ ہو سکے اور بیان کر سکے

خصوصی مقاصد: طالب علم اس قابل ہو کہ

() موضوعات کا مطلب بیان کر سکے

() عملی زندگی سے مثالوں کی نشاندہی کر سکے

() اپنی شخصیت اور معاشرے پر موضوعات کے مطابق اثرات پیدا کرنے کے طریقے بیان کر سکے

() اعلیٰ اخلاقی اقدار میں سے قوت برداشت۔قوت ارادی۔لگن وجذبہ۔وسیع النظری۔بے غرض۔انسانی دوستی شعور۔پاس آزادی۔کامل آگاہی اور خود شناسی کی اہمیت

() اخلاقیات سے متصف ہو کر قومی خدمت بہتر طور پر انجام دے سکے

() انسانی حقوق کا اعلامیہ/حقوق انسانی کی پالیسی 2018 کے بارے میں جان سکے

() انسانی حقوق کا معاشرتی اور معاشی ترقی میں اہمیت اور کردار بیان کر سکے

() حقوق اگاہی/معلومات تک رسائی کے قانون کو جان سکے

() ملازم پیشہ خواتین کا تحفظ کو اخلاقیات کا حصہ تصور کرے

TTQ 211 TARJAMA TUL QURAN / CIVIC-211

Theory	**32**	**T**	**P**	**C**
Practical	**0**	**1**	**0**	**1**

As per syllabus of BISE from PCTB / PECTA Book

Math-212 APPLIED MATHEMATICS-II

Total Contact Hours	**T**	**P**	**C**
Theory: 64 Hrs	**2**	**0**	**2**

AIMS: After completing the course the students will be able to:

Solve the problems of calculus and analytical Geometry.

COURSE CONTENTS

1. FUNCTIONS & LIMITS. 4 Hrs

1.1 Constants and variables
1.2 Functions & their types
1.3 The concept of limit
1.4 Limit of a function
1.5 Fundamental theorems on limit
1.6 Some important limits
1.7 Problems

2. DIFFERENTIATION. 4 Hrs

2.1 Increments
2.2 Different Coefficient or Derivative
2.3 Differentiation ab-initio or by first principle
2.4 Geometrical Interpretation of Differential Coefficient
2.5 Differential Coefficient of Xa, (ax + b)a
2.6 Three important rules
2.7 Problems.

3. DIFFERENTIATION OF ALGEBRIC FUNCTION 4Hrs

3.1 Explicit function
3.2 Implicit function
3.3 Parametric forms
3.4 Problems

4. DIFFERENTATION OF TRIGNOMETRIC FUNCTION. 4 Hrs

4.1 Differentional coefficient of sin x ,cos x ,tang x from first principle.
4.2 Differentional coefficient of Cosec x, Sec x, Cot x.
4.3 Differentiation of inverse trigonometric function.
4.4 Problems.

5. DIFFERENTIATION OF LOGARITHIMIC & EXPONENTIAL FUNCTION. 4 Hrs

5.1 Differentiation of In x
5.2 Differentiation of log ax
5.3 Differentiation of ax
5.4 Differentiation of ex 66

5.5 Problems.

6. RATE OF CHANGE OF VARIABLE. 4 Hrs

6.1 Increasing and decreasing function

6.2 Maxima and minima values

6.3 Criteria for maximum and minimum values.

6.4 Method of finding maxima and minima.

6.5 Problems.

7. INTEGRATION. 8 Hrs

7.1 Concept

7.2 Fundamental formulas

7.3 Important rules

7.4 Problems.

8. METHOD FOR INTEGRATION. 6 Hrs

8.1 Integration by substitution

8.2 Integration by parts

8.3 Problems.

9. DEFINITE INTEGRALS. 6 Hrs

9.1 Properties

9.2 Application to Area

9.3 Problems

10. PLANE ANALYTIC GEOMETRY & STRAIGHT LINE. 6 Hrs

10.1 Coordinate System

10.2 Distance Formula

10.3 The Ratio Formulas

10.4 Inclination and slope of a line

10.5 The Slope Formula

10.6 Problems.

11. EQUATION OF STRAIGHT LINE. 6 Hrs

11.1 Some Important Forms

11.2 General form

11.3 Angle formula

11.4 Parallelism and perpendicularity

11.5 Problems

12. THE EQUATION OF THE CIRCLE. 8 Hrs

12.1 Standard form of equation

12.2 Central form of equation

12.3 General form of equation

12.4 Radius & coordinate of the Centre

12.5 Problems

REFERENCE BOOKS

1. A Text Book of Applied Mathematics (Math-212) of TEVTA, published by National Book Foundation (NBF) 67

Math-212 APPLIED MATHEMATICS-II

INSTRUCTIONAL OBJECTIVES

1. USE THE CONCEPT OF FUNCTION AND THEIR LIMITS IN SOLVING SIMPLE PROBLEMS

1.1 Define a function

1.2 List all types of function

1.3 Explain the concept of limit and limit of a function

1.4 Explain fundamental theorem on limits

1.5 Derive some important limits

1.6 Solve simple problems on limits

2. UNDERSTAND THE CONCEPT OF DIFFERENTIAL COEFFICIENT

2.1 Derive mathematics expression for a differential coefficient.

2.2 Explain geometrical interpretation of different ional coefficient.

2.3 Differentiate a content, constant associated with a variable and the sum of finite number of function.

2.4 Solved related problems.

3. USE RULES OF DIFFERENTIAL TO SOLVE PROBLEMS OF ALGEBRIC FUNCTIONS.

3.1 Differentiate ab-initio Xn and (ax+b)n

3.2 Derive product, quotient and chain rules.

3.3 Find derivative of implicit function & explicit function.

3.4 Differentiate parametric forms; function w.r.t another function and by rationalization.

3.5 Solve problems using these formulas.

4. USE RULES OF DIFFERENTIATION TO SOLVE PROBLEMS OF ALGEBRIC FUNCTIONS.

4.1 Differentiate from first principle sin x ,cosx,tang x.

4.2 Derive formula for derivation of sec x,cosec x, cot x.

4.3 Find differential coefficient of inverse trigonometric functions.

5. USE RULES OF DIFFERENTIATION TO LOGARITHMIC AND EXPONENTIAL FUNCTIONS.

5.1 Derive formulas for differential coefficient of logarithmic and exponential functions.

5.2 Solve problems using these formulas.

6. UNDERSTAND RATE OF CHANGE OF ONE VARRIABLE WITH RESPECT TO ANOTHER.

6.1 Write expression for velocity, acceleration, and slope of a line.

6.2 Define an increasing and decreasing function, maxima and minima values, of inflection.

6.3 Explain criteria for maxima and minima values of a function.

6.4 Solve problems involving rate of change of variables.

7. APPLY CONCEPT OF INTEGRATION IN SOLVING TECHNOLOGICAL PROBLEMS

7.1 Explain the concept of integration

7.2 Write basic theorem of integration

7.3 List some important rules of integration

7.4 Derive fundamental formulas of integration

7.5 Solve problems based on these formulas /rules.

8. UNDERSTAND DIFFERENT METHODS OF INTEGRATION.

8.1 List standard formulas

8.2 Integrate a function by substitution method

8.3 Find integrals by the method of integration by parts

8.4 Solve problems using these methods.

9. UNDERSTAND THE METHOD OF SOLVING DEFENITE INTEGRALS.

9.1 Define definite integral

9.2 List properties of definite integrals using definite integrals.

9.3 Find areas under curves

9.4 Solve problems of definite integrals.

10. UNDERSTAND THE CONCEPT OF PLANE ANALYTIC GEOMETRY.

10.1 Explain the rectangular coordinate system

10.2 Locate points in different quadrants

10.3 Derive distance formula

10.4 Prove section formula

10.5 Derive slope formula

10.6 Solve problems using the above formulas.

11. USE EQUATIONS OF STRAIGHT LINE IN SOLVING PROBLEMS.

11.1 Define a straight line

11.2 State general form of equation of a straight line

11.3 Derive slope intercept and intercept forms of equations.

11.4 Derive expression for angle between two straight lines

11.5 Derives conditions of perpendicularity and parallelism lines

11.6 Solve problems involving these equations/formulas.

12. SOLVE TECHNOLOGICAL PROBLEMS USING EQUATION OF CIRCLE.

12.1 Define a circle

12.2 Describe standards, central and general forms of the equation of a circle.

12.3 Convert general forms to the central forms of equation of a circle.

12.4 Deduce formulas for the radius and the coordinates of the centre of a circle from the general form.

12.5 Derive equation of the circle passing through three given points.

12.6 Solve problems involving these equations

MDT-212 FUNDAMENTALS OF ECONOMICS

Total Contact Hours	**T**	**P**	**C**
Theory 64 Hrs	**2**	**0**	**2**

AIMS: This course aims to help students grasp the fundamental theories and analytical methods of economics. It covers basic economic concepts, market principles, production and cost, market structures, national income, economic fluctuations, macroeconomic policies, and international trade. Upon completion of the course, students will be able to understand economic phenomena, master basic economic analysis tools, and lay a foundation for pursuing further studies or entering related fields of economics.

COURSE CONTENTS

1. CONCEPTS OF ECONOMICS 4 Hrs

1.1 Definition and importance of economics
1.2 What is economics
1.3 Contents of economic study
1.3 Research methods in economics
1.4 Connection between economics and daily life
1.5 Advantages and disadvantages of market economy

2. DEMAND AND SUPPLY 8 Hrs

2.1 The concepts of demand and supply
2.2 The concepts of digital demand & supply
2.3 Understanding customer demand online
2.4 Supply in digital market
2.5 Demand and supply balance
2.6 Factors affecting demand and supply
2.7 Demand function and demand curve
2.8 Supply function and supply curve
2.9 How AI and automation affect supply curves
2.10 Government interventions (price floors/ceilings, subsidies)

3. CONSUMPTION AND UTILITY 6 Hrs

3.1 Consumption and consumption behavior
3.2 Consumer preferences and choices
3.3 Budget constraints and the consumption decision process
3.4 Consumer equilibrium and the law of demand

4. PRODUCTION AND COST 12 Hrs

4.1 Basic concepts of a firm
4.2 Production function and cost concepts
4.3 Profit maximization and production decisions
4.4 Short-term and long-term production decisions

4.5 Factors of production
4.6 Factor market equilibrium theory
4.7 Formation of factor prices
4.8 Concepts and types of costs
4.9 Analysis of short-term cost
4.10 Analysis of long-term cost

5. MARKET STRUCTURE 8 Hrs

5.1 Perfect competition market to monopoly spectrum
5.2 Formation and pricing strategies in monopoly markets
5.3 Overview of monopolistic competition and oligopoly markets
5.4 Market failures
5.5 Causes of market failure
5.6 Manifestations of market failure

6. NATIONAL INCOME THEORY 8 Hrs

6.1 GDP, GNP, and NNP
6.2 Meaning and components of GDP
6.3 Methods of GDP calculation
6.4 Consumption function and savings function
6.5 Macro-economic equilibrium
6.6 Multiplier theory

7. ECONOMIC FLUCTUATIONS AND INFLATION 8 Hrs

7.1 Impact of economic cycles and unemployment
7.2 Causes of economic cycles
7.3 Measures to address unemployment
7.4 Economic cycles
7.5 Causes and effects of inflation
7.6 Measures to combat inflation

8. MACROECONOMIC POLICY 4 Hrs

8.1 Fiscal policy and monetary policy
8.2 Objectives of macroeconomic policy
8.3 Tools and application of fiscal and monetary policy
8.4 Overview of macroeconomic policy

9. INTERNATIONAL TRADE AND EXCHANGE RATES 6 Hrs

9.1 Concept and importance of international trade
9.2 Basic forms and processes of international trade
9.3 Trade policies and marketing in international trade
9.4 Methods of exchange rate pricing
9.5 Factors affecting exchange rates
9.6 Development economics & global inequality

MDT-212 FUNDAMENTALS OF ECONOMICS

INSTRUCTIONAL OBJECTIVE

1. CONCEPTS OF DIGITAL ECONOMICS

1.1 Understand the definition and importance of economics

1.2 Understand the basic concept and scope of economics. also Differentiate between microeconomics and macroeconomic

1.3 Master the research methods in economics

1.4 Understand the connection between economics and daily life

1.5 Understand the advantages and disadvantages of a market economy

2. THE BASIC PRINCIPLES OF DEMAND AND SUPPLY

2.1 Master the basic concepts of demand and supply

2.2 Explain the concepts of digital demand and supply

2.3 Understand customer demand in the online marketplace

2.4 Analyze supply factors in the digital market

2.5 Evaluate the balance between demand and supply in digital environments

2.6 Familiarize yourself with price elasticity and its economic significance

2.7 Master the relationship between price mechanism and resource allocation

2.8 Understand the formation of market equilibrium price

2.9 Analyze how AI and automation influence supply curves in digital markets

2.10 Explain the impact of government interventions such as price floors, price ceilings, and subsidies

3. THE ECONOMIC THEORIES OF CONSUMPTION AND UTILITY

3.1 Understand the basic concepts of consumption and consumption behavior

3.2 Master the factors affecting consumer preferences and choices

3.3 Familiarize yourself with budget constraints and the consumption decision process

3.4 Master consumer equilibrium and the law of demand

4. THE PRODUCTION PROCESS AND COST THEORY

4.1 Understand the basic concepts of a firm

4.2 Master the concepts of production function and cost

4.3 Understand profit maximization and production decisions

4.4 Familiarize yourself with short-term and long-term production decisions

4.5 Understand the concept of factors of production

4.6 Master the theory of factor market equilibrium

4.7 Understand the formation of factor prices

4.8 Familiarize yourself with the concepts and types of costs

4.9 Master short-term cost analysis

4.10 Familiarize yourself with long-term cost analysis

5. MARKET STRUCTURE AND ITS TYPES

5.1 Understand the characteristics of a perfectly competitive market

5.2 Understand the characteristics of a monopoly market

5.3 Master the formation and pricing strategies of monopoly markets

5.4 Understand the concepts of monopolistic competition and oligopoly markets

5.5 Familiarize yourself with the concept of market failure

5.6 Master the causes of market failure

5.7 Familiarize yourself with the manifestations of market failure

6. NATIONAL INCOME AND MACROECONOMIC THEORY

6.1 Explain GDP, GNP, and NNP, highlighting what they measure and their limitations

6.2 Master the meaning and components of GDP

6.3 Familiarize yourself with methods of GDP calculation

6.4 Understand the concepts of consumption function and savings function

6.5 Master the theory of macroeconomic equilibrium

6.6 Understand the basic concept of multiplier theory

7. THE IMPACT OF ECONOMIC FLUCTUATIONS AND INFLATION

7.1 Understand the impact of economic cycles and unemployment

7.2 Master the causes of economic cycles

7.3 Understand measures to address unemployment

7.4 Familiarize yourself with the characteristics of economic cycles

7.5 Understand the causes and effects of inflation

7.6 Master the measures to combat inflation

8. THE TOOLS AND APPLICATION OF MACROECONOMIC POLICY

8.1 Master the basic concepts of fiscal policy and monetary policy

8.2 Understand the main objectives of macroeconomic policy

8.3 Familiarize yourself with the tools and application of fiscal and monetary policies

8.4 Understand the implementation methods of macroeconomic policy

9. THE BASIC CONCEPTS OF INTERNATIONAL TRADE AND EXCHANGE RATES

9.1 Understand the concept and importance of international trade

9.2 Master the basic forms and processes of international trade

9.3 Familiarize yourself with the relationship between international trade policies and marketing

9.4 Master the methods of exchange rate pricing

9.5 Understand the main factors affecting exchange rates

9.6 Understand the principles of development economics and the factors contributing to global inequality

MDT-222 CATEGORY MANAGEMENT

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practica	**l96Hrs**	**1**	**3**	**2**

AIMS: This course provides a comprehensive overview of the category management process in retail stores, covering planning before store opening, evaluation after opening, competitive strategy development, and tactical execution. It equips students with skills in category definition, role positioning, evaluation, goal setting, and strategy selection. Emphasis is placed on mastering the five key tactics: product assortment, space management, pricing, promotions, and supply chain. The course uses an interactive and action-oriented approach, encouraging teamwork, innovation, and communication. This course enables students to analyze market demand, optimize product mix, and drive performance. Ultimately, learners will understand the importance of category management and apply strategies to enhance efficiency and competitiveness in retail businesses

COURSE CONTENTS

1. CATEGORY MANAGEMENT PLANNING 8 Hrs

1.1 Category Management An Overview
1.2 Benefits of Category Management for buyers and sellers
1.3 Objectives of Category Management
1.4 Difference between traditional buying and category management
1.5 Classification of Categories
1.6 Category Structure Setup
1.7 Responsibilities and skills of a category manager

2. CATEGORY PLANNING AND EXECUTION 6 Hrs

2.1 The Role of Categories in Shop
2.2 Category Goal Setting
2.3 The Category Management Process
2.4 Supplier Relationship Management
2.5 Category Assessment Indicators
2.6 Category Management Tools

3. CATEGORY STRATEGY DEVELOPMENT 8 Hrs

3.1 Category Strategy Selection
3.2 Key Considerations
3.3 Traffic flow improvement strategy
3.4 Average transaction value enhancement strategy
3.5 Profit Increase strategy

4. IMPLEMENTATION OF CATEGORY TACTICS 10 Hrs

4.1 Product Assortment Tactics

4.2 Space Management Tactics
4.3 Product Pricing Tactics
4.4 Product Promotion Tactics
4.5 Supply Chain Management Tactics
4.6. Supplier Selection Tactics
4.7. Challenges in Category Management
4.8. Future of Category Management

Recommended textbooks

A. Category Management in Purchasing – 5th Edition (2024) Positive Procurement
B. Strategic Sourcing and Category Management: Lessons Learned at IKEA – 2nd Edition (2019) Barnes & Noble
C. Retail Category Management: Decision Support Systems for Assortment, Shelf Space, Inventory and Price Planning – First Edition (2011) SpringerLinkGoogle Books
D. The Category Management Handbook – (Edition year not specified)

MDT-222 CATEGORY MANAGEMENT

INSTRUCTIONAL OBJECTIVE

1. INTRODUCTION TO CATEGORY MANAGEMENT

1.1 Explain the basic concepts of categories and category management

1.2 Explain the benefits of Category Management for both buyers and sellers

1.3 Explain the objectives of Category Management

1.4 Differentiate between traditional buying and category management

1.5 Explain the ways for creating a category organizational structure

1.6 Elaborate the different classification of categories

1.7 Explain the method for product assortment and single item configuration

1.8 Grasp the responsibilities and skills of a category manager

2. CATEGORY PLANNING AND EXECUTION

2.1 Explain the Role of categories in Shop

2.2 Interpret the common methods and step of category Goal Setting

2.3 Retailer performance evaluation

2.4 Define the Category Management Process and explain its role in modern retailing & Identify the main stages of the process

2.5 Explain the role of communication, trust, and negotiation in managing supplier partnerships & supplier etc

2.6 Identify key indicators such as sales volume, market share, profit margin, stock turnover, and customer satisfaction.

2.7 Explain how each tool supports the Category Management process.

3. CATEGORY STRATEGY DEVELOPMENT

3.1 Explain the basic principles of category strategy selection

3.2 Interpret the application of strategies to improve traffic flow

3.3 Explain the method for setting strategies to increase average transaction value

3.4 Elaborate the methods for implementing profit enhancement strategies

4. IMPLEMENTATION OF CATEGORY TACTICS

4.1 Explain the methods for implementing product assortment tactics

4.2 Interpret the techniques for implementing space management tactics

4.3 Explain methods for setting and executing product pricing tactics

4.4 Interpret the implementation methods for product promotion tactics

4.5 Master the methods for executing supply chain management tactics

4.6 Identify key criteria for evaluating suppliers such as cost, quality, reliability etc and explain different supplier selection tactics including competitive bidding and strategic partnerships.

4.7 Identify common internal and external challenges faced in category management

4.8 Explain emerging trends shaping the future of category management (Digitalization & AI)

MDT-222 CATEGORY MANAGEMENT

LIST OF PRACTICALS 96 Hrs

1. Conduct research and analysis on the category structures of offline retail enterprises, and draw a category management framework diagram.
2. Collect screenshots of category displays from online e-commerce platforms and analyze differences vs. offline physical stores.
3. Analyze a successful retail case to evaluate how category management improves business competitiveness and customer satisfaction.
4. Design an initial category plan for a newly planned store.
5. Develop a category organization structure chart for a retail store.
6. Configure product mixes for retail stores in different industries based on category needs.
7. Analyze data from multiple product categories and evaluate sales, profit, and other indicators.
8. Analyze the roles of various categories within stores (traffic-driving, profit categories, etc.).
9. Evaluate retailers' performance in category management.
10. Conduct supplier evaluations based on quality, price, and reliability.
11. Analyze competitors' category strategies and formulate countermeasures.
12 Identify and apply appropriate strategies for managing given product categories to enhance retail performance.
13. Develop strategies to increase customer traffic.
14. Develop methods to increase average transaction value.
15. Develop strategies to enhance profits.
16 Modify and optimize product mixes according to selected retail strategies to improve sales and profitability.
17. Design and simulate store space management plans.
18. Develop pricing strategies for products across industries.
19. Design and simulate promotional activities for products in stores.
20. Analyze and simulate supply chain management optimization plans.

MDT-232 SALES MANAGEMENT

Total Contact Hours

Theory	**32 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**1**	**3**	**2**

AIMS: This course introduces the core concepts and functions of sales and sales management. Students will learn the stages of the sales process along with key techniques to plan and execute sales effectively. The course covers sales planning, team management, channel management, and customer relationship management. Learners will also gain skills in applying management knowledge to analyze sales data and optimize sales processes. By the end, students will be equipped to improve the efficiency and effectiveness of sales operations in real business settings.

COURSE CONTENTS

1. BASIC UNDERSTAND OF SALES 2 Hrs

1.1 Meanings & definition of sales
1.2 Objectives of sales activities
1.3 Types of sales
1.4 Relationship between sales and marketing
1.5 Sales ethics

2. THE SALES PROCESS 06 Hrs

2.1 Objectives of Sales Process
2.2 Stages of sales process
2.3 Product presentation
2.4 Sales negotiation
2.5 Fostering customer's Trust
2.6 Techniques for handling customer objections

3. SALES TECHNIQUES AND CUSTOMER BEHAVIOUR 05 Hrs

3.1 Sales plan development
3.2 Customer needs identification and analysis
3.3 Competitive analysis and positioning
3.4 Product knowledge preparation
3.5 Sales strategy formulation
3.6 Sales techniques

4. INTRODUCTION TO SALES MANAGEMENT 4 Hrs

4.1 Definition & scope of sales management
4.2 Functions of sales management
4.3 Role of sales manager
4.4 Relationship between sales management and marketing management
4.5 Organizing a sales department (structure, hierarchy, roles)

5. SALES MANAGEMENT PLANNING AND CONTROL 9 Hrs

5.1 Sales objectives and targets

5.2 Sales plan management

5.3 Sales budget management

5.4 Sales opportunity management

5.5 Sales channel management

5.6 Sales data collection and organization

5.7 Sales performance analysis

5.8 Sales report writing

5.9 Sales process optimization

6. MANAGING THE SALES FORCE 4 Hrs

6.1 Recruitment and selection of salespeople

6.2 Compensation plans (Salary, Commission, Bonus & Allowances)

6.3 Motivating the sales team (Financial and non-financial incentives)

6.4 Performance appraisal of salespeople

6.5 Challenges in sales force management

Recommended textbooks:

A. Selling and Sales Management – 10th Edition (2015) ResearchGate

B. Sales Management: Analysis and Decision Making – 9th Edition (2015) ResearchGate

C. The Challenger Sale: Taking Control of the Customer Conversation – 1st Edition (2011) Wikipedia

D. SPIN Selling – Original Edition (1988)

MDT-232 SALES MANAGEMENT

INSTRUCTIONAL OBJECTIVE

1. FUNDAMENTALS OF SALES

1.1 Explain the definition of sales

1.2 Interpret the significance of sales

1.3 Explain the relationship between sales and marketing

1.4 Elaborate the basic principles of sales ethics

1.5 Explain different types of sales

2. THE SALES PROCESS

2.1 Identify the main purposes of a sales process

2.2 Describe the step-by-step stages of the sales process

2.3 Define the concept of negotiation in sales and list common techniques used in negotiation.

2.4 Explain the importance of highlighting features, advantages, and benefits (FAB) of a product.

2.5 Identify common customer objections (price, quality, need, urgency).

3. SALES TECHNIQUES AND CUSTOMER BEHAVIOUR

3.1 Define what a sales plan is and explain its purpose.

3.1 Explain the importance of understanding customer needs in sales.

3.1 Define competition and explain its impact on sales.

3.1 Identify basic sales strategies (discounts, bundling, promotions, direct selling).

3.1 List common sales techniques and identify which sales technique is most suitable for different types of customers.

4. INTRODUCTION TO SALES MANAGEMENT

4.1 Explain the scope of sales management with examples from local businesses and differentiate sales management from general sales activities.

4.2 Identify the key functions of sales management

4.3 Explain how a sales manager motivates and guides the sales team.

4.4 Differentiate between sales management and marketing management.

4.5 Describe the basic structure of a sales department.

5. SALES MANAGEMENT- PLANNING AND CONTROL

5.1 Define sales objectives and targets and explain why setting sales targets is important.

5.2 Describe the steps in developing a sales plan.

5.3 Explain the meaning and purpose of a sales budget.

5.4 Define sales opportunities with local examples (e.g., Eid season, wedding season) and list methods of identifying sales opportunities.

5.5 Identify different sales channels (retail, wholesale, online, direct sales).

5.6 Define sales data and its importance.

5.7 Explain what sales performance means.

5.8 Identify key parts of a sales report (introduction, data, analysis, conclusion).

5.9 Explain the meaning of optimization in sales and identify weak areas in a sample sales process.

6. MANAGING THE SALES FORCE

6.1 Define recruitment and selection in the context of sales.

6.2 Explain different types of compensation plans.

6.3 Define motivation and its importance in sales management.

6.4 Define performance appraisal and list common criteria used for evaluating salespeople

6.5 Identify common challenges in sale discuss examples of local salesforce challenges (e.g., in retail shops, mobile networks).

MDT-232 SALES MANAGEMENT

LIST OF PRACTICALS 96 Hrs

1. Prepare a chart listing direct sales, retail, wholesale, online, and telemarketing channels with examples from their local market.
2. List common customer objections (e.g., "too expensive") and prepare responses.
3. Prepare a checklist of at least 10 qualities of a good salesperson and self-assess them.
4. Prepare a flow chart showing personal selling steps: Prospecting → Approach → Presentation → Handling Objections → closing → Follow-up.
5. Make a list of objectives of sales activities and support each with one local example (e.g., "increase revenue → local clothing shop").
6. Prepare a chart showing different types of sales (consumer, industrial, online, personal) with local market
7. Create a diagram showing the relationship between sales and marketing using a real local business (e.g., Pepsi, Khaadi, etc.).
8. Prepare a step-by-step flow chart showing the stages of the sales process.
9. Prepare a table listing common customer objections (e.g., "too expensive") and write appropriate responses.
10. Prepare a simple sales plan for a small shop (e.g., stationery store or tuck shop in school).
11. Prepare a simple sales plan for a small shop (e.g., stationery store or tuck shop in school).
12. Write down at least 5 sales strategies that a local retail shop could use to increase sales.
13. Draw an organizational chart of a sales department (showing structure, hierarchy, and roles).
14. Prepare a table comparing sales management and marketing management with examples from a local company.
15. Prepare a list of sales objectives and targets for a small retail shop (e.g., monthly sales goal for a bookshop).
16. Draft a simple sales plan for selling a new product in the local market.
17. Collect and organize sample sales data from 5–10 classmates (e.g., how many pens, notebooks, or snacks they bought in a week) and prepare a table.
18. Analyze the collected sales data and write a short sales report (half a page) with findings.
19. Prepare a checklist of qualities required for recruiting a good salesperson.
20. Prepare a table showing different compensation plans (salary, commission, bonus, allowances) with simple local examples.
21. Write down at least 5 methods of motivating a sales team (financial and non-financial).
22. Prepare a performance appraisal form for evaluating a salesperson (simple format with criteria like punctuality, sales achieved, behavior).

MDT-244 NEW MEDIA MARKETING

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**192 Hrs**	**2**	**6**	**4**

AIMS: Through this course, students will gain an Understand of the fundamental theories of new media marketing, master techniques for accurately targeting users and content, and become familiar with the application of various new media marketing methods. Students will learn how to plan and promote marketing strategies across different new media platforms, with the ability to operate on platforms such as short videos and H5. Through practical training, students will enhance their hands-on skills and be capable of using new media marketing tools to develop effective marketing strategies for businesses, driving brand communication and user growth.

COURSE CONTENTS

1. INTRODUCTION TO NEW MEDIA MARKETING 6 hrs

1.1 Evolution from traditional to digital media
1.2 Characteristics of digital media vs traditional marketing
1.3 Mainstream new media marketing platforms
1.4 Trends in new media marketing
1.5 Application of AIGC technology in new media marketing
1.6 Forms of new media content (video, memes, infographics, GIFs, voice content, reels)

2. NEW MEDIA MARKETING STRATEGIES 8hrs

2.1 Word-of-mouth marketing
2.2 Event marketing
2.3 Scarcity marketing
2.4 IP marketing
2.5 Interactive marketing
2.6 Emotional marketing
2.7 Cross-industry marketing
2.8 Leverage marketing

3. NEW MEDIA CONTENT POSITIONING 6 hrs

3.1 Identifying new media user needs
3.2 Analyzing new media user personas
3.3 New media content planning
3.4 Types of new media content topics
3.5 Methods for selecting new media content topics

4. Multimedia Content Creation 2 hrs

4.1 Photography and image selection

4.2 Short video production

4.3 AI-based design tools (like Chatgpt or latest application, Canva AI)

5. NEW MEDIA COPYWRITING PLANNING AND EDITING 12 hrs

5.1 Definition and characteristics of new media copy-writing

5.2 Types of new media copy-writing

5.3 Structure of new media copy-writing

5.4 Creative planning for new media copy-writing

5.5 Crafting titles for new media copy-writing

5.6 Product promotion copy-writing

5.7 Brand promotion copy-writing

5.8 Marketing campaign copy-writing

6. SHORT VIDEO PLANNING AND PRODUCTION FOR NEW MEDIA 12 hrs

6.1 Definition and characteristics of short videos

6.2 Types of short videos

6.3 Script planning for short videos

6.4 Product introduction short video production

6.5 Live broadcast teaser short video production

6.6 Brand promotion short video production

7. H5 MARKETING CONTENT CREATION 6 hrs

7.1 Features and advantages of H5 marketing

7.2 H5 page design

7.3 H5 page layout

7.4 Principles of H5 interactive design

7.5 Common interactive methods for H5

7.6 UX/UI basics for mobile content

8. NEW MEDIA MARKETING PROMOTION 4 hrs

8.1 Search engine promotion

8.2 Paid promotion on new media platforms

8.3 Community promotion

8.4 Social media promotion

8.5 Word-of-mouth marketing and user growth

8.6 Influencer outreach, affiliate marketing

9. EVALUATION OF NEW MEDIA MARKETING EFFECTIVENESS 8 hrs

9.1 Importance of evaluating new media marketing effectiveness

9.2 Dimensions and metrics for evaluating new media marketing effectiveness

9.3 Methods and tools for evaluating new media marketing effectiveness

9.4 Optimizing new media marketing

Recommended textbooks:

A. Social Media Marketing – 5th Edition (2023) Sage College Publishing

B. Social Media Marketing: A Strategic Approach – 3rd Edition (2025) Cengage

C. The New Rules of Marketing and PR – Latest Edition (2024) MentorCruiseSalesforce

D. Contagious: Why Things Catch On – (2025–listed among best reads)

MDT-244 NEW MEDIA MARKETING

INSTRUCTIONAL OBJECTIVES

1. THE CONCEPT AND TRENDS OF NEW MEDIA MARKETING

1.1 Explain the evolution from traditional media to digital media

1.2 Differentiate the characteristics of digital media from traditional marketing

1.3 Understand the application of mainstream new media marketing platforms

1.4 Understand the development trends in new media marketing

1.5 Master the application of AIGC technology in new media marketing

1.6 Identify and describe various forms of new media content

2. Understand NEW MEDIA MARKETING STRATEGIES

2.1 Understand the basic concepts and applications of word-of-mouth marketing

2.2 Familiarize yourself with the strategies and implementation methods of event marketing

2.3 Understand the core concepts and techniques of scarcity marketing

2.4 Master the definition and operational steps of ip marketing

2.5 Master the forms and practical methods of interactive marketing

2.6 Understand the elements and influence of emotional marketing

2.7 Familiarize yourself yourself with the application scenarios and effects of cross-industry marketing

2.8 Understand the operational methods and success cases of leverage marketing

3. THE TECHNIQUES OF NEW MEDIA CONTENT POSITIONING

3.1 Understand the methods of positioning new media user needs

3.2 Familiarize yourself with the analysis methods of new media user personas

3.3 Understand the basic steps of new media content planning

3.4 Master the types of new media content topics

3.5 Understand the methods and techniques for selecting new media content topics

4. FAMILIARITY WITH THE PREPARATION AND PRODUCTION OF NEW MEDIA MARKETING MATERIALS

4.1 Understand the techniques for photography and image selection

4.2 Understand the process and key points of short video production

4.3 Explore AI-based design tools such as ChatGPT and Canva AI for content creation."

5. Master NEW MEDIA COPYWRITING PLANNING AND EDITING TECHNIQUES

5.1 Understand the meaning and characteristics of new media copy-writing

5.2 Familiarize yourself with the types of new media copy-writing

5.3 Familiarize yourself with the structure of new media copy-writing

5.4 Understand the methods of creative planning for new media copy-writing

5.5 Master techniques for crafting titles in new media copy-writing

5.6 Familiarize yourself with key points for product promotion copy-writing

5.7 Master techniques for brand promotion copy-writing

5.8 Understand the methods of marketing campaign copy-writing

6. Master THE PROCESS OF SHORT VIDEO PLANNING AND PRODUCTION FOR NEW MEDIA

6.1 Understand the meaning and characteristics of short videos

6.2 Familiarize yourself with the types and application scenarios of short videos

6.3 Understand the basic principles of short video script planning

6.4 Master key points in producing product introduction short videos

6.5 Familiarize yourself with the methods of producing live broadcast teaser short videos

6.6 Understand the techniques for producing brand promotion short videos

7. Understand THE CREATION AND DESIGN OF H5 MARKETING CONTENT

7.1 Understand the features and advantages of H5 marketing

7.2 Familiarize yourself with the basic principles of H5 page design

7.3 Understand the techniques and methods for H5 page layout

7.4 Master the principles and application of H5 interactive design

7.5 Familiarize yourself with common interactive methods in H5

7.6 Understand the basics of UX/UI design for creating effective mobile content

8. FAMILIARITY WITH THE CHANNELS AND STRATEGIES FOR NEW MEDIA MARKETING PROMOTION

8.1 Understand the basic methods of search engine promotion

8.2 Familiarize yourself with paid promotion methods on new media content platforms

8.3 Understand the techniques and methods for community promotion

8.4 Master strategies and tools for social media promotion

8.5 Understand the methods and effects of word-of-mouth marketing and user growth

8.6 Explain influencer outreach and affiliate marketing techniques.

9. Master NEW MEDIA MARKETING EFFECTIVENESS EVALUATION AND OPTIMIZATION TECHNIQUES

9.1 Understand the importance and role of evaluating new media marketing effectiveness

9.2 Familiarize yourself with the dimensions and metrics for evaluating new media marketing effectiveness

9.3 Master the methods and tools for evaluating new media marketing effectiveness

9.4 Understand the basic ideas and steps for optimizing new media marketing

MDT-244 NEW MEDIA MARKETING

LIST OF PRACTICALS 192 Hrs

1. Design duties and task allocations for new media marketing positions within an enterprise by simulating daily task distribution.
2. Compare mainstream new media marketing platforms and summarize emerging industry trends.
3. Research and discuss real-world cases of AIGC (AI-generated content) technology applications in marketing.
4. Design and implement a word-of-mouth marketing plan to evaluate its effectiveness.
5. Plan and execute an event marketing campaign and analyze audience engagement outcomes.
6. Apply a hunger marketing strategy and evaluate its impact on consumer response and sales performance.
7. Analyze the IP image of a major brand and assess how it strengthens brand identity.
8. Design an interactive marketing activity to enhance audience participation and engagement.
9. Develop a written report analyzing emotional or cross-border marketing copy for effectiveness and tone.
10. Select a trending topic and plan a trend marketing strategy aligned with brand positioning.
11. Analyze target users across different industries and create demand positioning reports for selected enterprises.
12. Develop new media user profiles for various enterprises based on demographic and behavioral data.
13. Plan and execute engaging content topics for new media marketing channels.
14. Capture and process diverse image materials suitable for online marketing campaigns.
15. Shoot short video materials across different scenarios to demonstrate storytelling and visual communication skills.
16. Plan and edit product promotion copy tailored for different product categories.
17. Plan and edit brand promotion copy adapted for multiple industries.
18. Plan and edit marketing activity copy for varied campaign types.
19. Develop and write short video scripts for product promotion content.
20. Plan and write live-stream pre-heating short video scripts for different holidays.
21. Produce live-stream pre-heating short videos for various holiday promotions and evaluate audience reach.
22. Produce brand promotion short videos for different industries showcasing creativity and message clarity.
23. Plan and write brand promotion short video scripts tailored for different industries.

24. Design and produce event invitation H5 promotional posters to attract participation.
25. Design and produce story-based H5 promotional posters to enhance emotional engagement.
26. Design and produce event participation H5 promotional posters to boost audience interaction.
27. Implement search engine promotion strategies and evaluate their impact on visibility and traffic.

MDT-253 DIGITAL INTERACTIVE MARKETING

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**2**	**3**	**3**

AIMS: This module equips learners to grasp the core logic of digital interactive marketing, master cutting-edge strategies, and build high-stickiness connections with consumers via innovative digital platforms. It focuses on developing key capabilities: creating interactive content that drives user participation and boosts penetration; using refined social media tactics to increase engagement, brand affinity, and private domain value; applying tools like gamification, chatbots, and AR/VR to link technology with user experience; and leveraging personalized recommendation algorithms and interactive video campaigns for precision audience engagement. Additionally, the module teaches using professional analytics to measure campaign performance, emphasizes digital marketing ethics (e.g., user privacy, data compliance) to build brand trust, and helps learners develop full-funnel capabilities—including managing the user lifecycle (acquisition, activation, retention, conversion, referral), executing digital marketing strategies, and using data analysis to optimize campaigns and improve ROI.

COURSE CONTENTS

1. COGNITION OF DIGITAL INTERACTIVE MARKETING 8 Hrs

1.1 Target customer insight awareness
1.2 Target customer insight methods
1.3 Main channels for interactive marketing
1.4 Interactive marketing channel planning methods and techniques
1.5 Word-of-mouth marketing planning
1.6 Event marketing planning
1.7 Opportunistic marketing planning
1.8 Scarcity marketing planning
1.9 Emotional marketing planning

2. DIGITAL CUSTOMER DEVELOPMENT 12 Hrs

2.1 Customer development awareness and principles
2.2 Customer development strategies and techniques
2.3 Identifying potential customers
2.4 Analyzing potential customer needs
2.5 Methods for developing potential customers
2.6 Behavioral customer awareness
2.7 Customer behavior analysis indicators and methods
2.8 Customer relationship analysis and marketing

2.9 Secondary customer development

3. DIGITAL CUSTOMER RETENTION MARKETING 12 Hrs

3.1 Customer value awareness

3.2 Customer value segmentation methods and differentiated marketing

3.3 New customer retention awareness

3.4 Key behavioral analysis of new customers

3.5 New customer retention marketing methods

3.6 Active customer retention awareness and models

3.7 Active customer retention marketing methods

3.8 Win-back flows, content automation triggers

3.9 Lost customer awareness and early warning models

4.0 Reacquiring lost customers

4. DIGITAL MARKETING CONVERSION 12 Hrs

4.1 Marketing conversion path awareness

4.2 Design ideas and elements of marketing conversion paths

4.3 Live streaming marketing awareness

4.4 Live streaming marketing conversion strategies and design

4.5 Promotional activities awareness and conversion strategies

4.6 Promotional activity design

4.7 Experiential marketing awareness and conversion strategies

4.8 Experiential marketing conversion design

5. DIGITAL FISSION MARKETING 12 Hrs

5.1 Overview of digital fission marketing

5.2 K-factor, incentive design, fraud checks

5.3 Elements of digital fission marketing

5.4 Share motivation in digital fission marketing communication

5.5 Elements of word-of-mouth fission marketing

5.6 Ways and communication characteristics of word-of-mouth fission marketing

5.7 Implementing word-of-mouth fission marketing

5.8 Social fission marketing methods and driving forces

5.9 Interest-based fission marketing categories and methods

6.0 New invitation and sharing activity design model

6. DIGITAL INTERACTIVE MARKETING EFFECTIVENESS ANALYSIS 8 Hrs

6.1 Meaning and content of customer analysis

6.2 Types of customer data and analysis indicators

6.3 Methods for measuring customer experience effectiveness

6.4 Attribution challenges, GA4 modeled conversions, frequency capping

6.5 Marketing content forms and distribution methods

6.6 Marketing content analysis indicators and optimization methods
6.7 Marketing activity categories
6.8 Methods and indicators for analyzing marketing activity effectiveness
6.9 Marketing activity optimization methods

Recommended textbooks

A. Digital Marketing: Strategy, Implementation, and Practice – 7th Edition (2022)
B. Social Media Marketing: A Strategic Approach – 3rd Edition (2025)
C. SPIN Selling – Original Edition (1988)
D. The Challenger Sale – 1st Edition (2011)
E. Category Management in Purchasing – 5th Edition (2024)

MDT-253 DIGITAL INTERACTIVE MARKETING

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND DIGITAL INTERACTIVE MARKETING

1.1 Definition, scope, and significance

1.2 Role of interactivity in consumer engagement

1.3 Understand the meaning and content of target customer insights

1.4 Master methods for identifying target customers

1.5 Understand the main channels for digital interactive marketing

1.6 Understand the main approaches in digital interactive marketing

1.7 Chatbots for real-time customer interaction

1.8 Be capable of evaluating ethical and privacy issues in interactive marketing.

2. FAMILIARITY WITH DIGITAL CUSTOMER DEVELOPMENT METHODS

2.1 Understand the content and principles of customer development

2.2 Familiarize yourself with customer development strategies and techniques

2.3 Understand the meaning and core traits of potential customers

2.4 Master methods for analyzing potential customer needs

2.5 Master methods for developing potential customers

2.6 Understand the meaning and core traits of behavioral customers

2.7 Familiarize yourself with customer behavior analysis indicators and methods

2.8 Understand customer relationship analysis methods and marketing strategies

2.9 Master methods for reactivating customers

3. Master DIGITAL CUSTOMER RETENTION MARKETING METHODS

3.1 Familiarize yourself with the meaning of customer value

3.2 Master methods for customer value segmentation and differentiated marketing

3.3 Understand the content of new customer retention

3.4 Master steps for mining key behaviors of new customers

3.5 Master methods for new customer retention marketing

3.6 Understand active customer retention content and models

3.7 Familiarize yourself with methods for active customer retention marketing

3.8 Familiarize yourself with churn customer early warning models and types of churn customers

3.9 Master methods for reactivating churn customers

4. Master DIGITAL MARKETING CONVERSION METHODS

4.1 Understand the meaning and influencing factors of marketing conversion paths

4.2 Familiarize yourself with design ideas and elements of marketing conversion paths

4.3 Understand the characteristics of live streaming marketing

4.4 Master conversion strategies and design methods for live streaming marketing

4.5 Familiarize yourself with the meaning of promotions and conversion strategies for promotional activities

4.6 Master the elements of promotional activity design

4.7 Understand types and strategies of experiential marketing

4.8 Master techniques of experiential marketing

5. Master DIGITAL FISSION MARKETING METHODS

5.1 Understand the connotation of digital fission

5.2 Master the three elements of digital fission marketing

5.3 Familiarize yourself with sharing motivations in digital fission marketing communication

5.4 Master the five elements of word-of-mouth fission marketing

5.5 Familiarize yourself with ways and communication characteristics of word-of-mouth fission marketing

5.6 Master implementation methods for word-of-mouth fission marketing

5.7 Understand common methods and driving forces of social fission marketing

5.8 Master categories and common methods of interest-based fission marketing

5.9 Understand the design model for new invitation and sharing activities

6. Understand DIGITAL INTERACTIVE MARKETING EFFECTIVENESS ANALYSIS

6.1 Understand the meaning and content of customer analysis

6.2 Understand types of customer data and analysis indicators

6.3 Master methods for measuring customer experience effectiveness

6.4 Familiarize yourself with forms and distribution methods of digital marketing content

6.5 Familiarize yourself with analysis indicators and optimization methods for digital marketing content

6.6 Understand classifications of digital marketing activities

6.7 Master methods and indicators for analyzing digital marketing activity effectiveness

6.8 Master methods for optimizing digital marketing activities

MDT-253 DIGITAL INTERACTIVE MARKETING

LIST OF PRACTICALS 96 Hrs

1. Locate target audience, and create marketing communities for the service industry (hotels, tourism, etc.)
2. Locate target audience, and create marketing communities for the product sales industry (daily consumables, etc.)
3. Develop and test a chatbot prototype for real-time customer interaction using any available platform
4 Engage with community members to increase community activity and improve member retention rates.
5 Utilize marketing tools to promote the community and expand its membership base.
6 Identify target followers, prepare registration materials, and set up a complete social media account matrix for brand presence.
7. Invite seed followers according to brand marketing positioning, quickly complete account cold start
8. Combine brand positioning and promotional needs to complete social media account promotion, quickly increase follower numbers
9. Create marketing content according to social media features and follower needs to increase brand awareness
10. Use fan marketing tools to design voting activities and guide fan interaction
11. Use gamification techniques (point systems, badges, digital rewards) to increase fan activity and retention
12. Use fan marketing tools to design interactive gift activities to increase fan participation
13. Use fan marketing tools to design lottery activities like big wheel, smashing golden eggs, etc., to stimulate fan enthusiasm
14. Analyze customer characteristics, identify opinion leaders who align with brand values, and achieve efficient brand word-of-mouth spread through key influencers
15. Select and evaluate effective word-of-mouth marketing channels to enhance brand awareness and customer engagement.
16. Explore product and service selling points, create word-of-mouth marketing hotspots, increase consumer trust, and rapidly form word-of-mouth effects
17. Create customer-centered marketing topics, complete multi-channel topic spread, and enhance topic heat
18. Trigger marketing topics through activities, promote marketing hotspots, and quickly increase word-of-mouth viral spread
19. Create and test an interactive AR or VR demo for a product/service to evaluate consumer feedback
20. Optimize app (Android, IOS), conduct activity sign-up, and pass the review process

21. Perform ASO optimization, complete app promotion, and improve the app's organic search ranking
22. Conduct app ranking bidding, complete app promotion, and improve the app's paid ranking
23. Perform audience segmentation analysis, precisely target potential customers
24. Create or select different forms of app ad content to stimulate download demand
25. Complete app ads placement to expand app publicity and increase downloads

26 Analyze customer monitoring data to identify dormant customers and implement targeted brand marketing campaigns that increase active customer engagement.

27 Design promotional activity rules and set up limited-time and limited-quantity offers to boost customer conversion rates.

28. Set promotional activity rules, complete group-buying activity setup to promote customer conversion
29. Set promotional activity rules, complete coupon distribution setup to promote customer conversion
30. Conduct mini-program geographical location targeting according to business scope, complete mini-program LBS promotion to improve mini-program open rate
31 Select relevant keywords based on mini-program business content and ranking algorithms, and perform optimization to improve search ranking and open rate.
32. Create or select interactive video/graphic marketing content that aligns with brand communication needs
33. Mini-project: Design and present a complete interactive digital campaign integrating AR/VR, chatbots, gamification, and social media interactivity

MDT-263 DIGITAL ADVERTISING MARKETING

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**2**	**3**	**3**

AIMS: Through systematic learning, students should master the core knowledge of digital advertising marketing, including search ranking optimization, search bidding marketing, and recommendation engine marketing. They will also acquire key skills in digital advertising environment analysis, content planning, effect analysis, and optimization.

COURSE CONTENTS

1. DIGITAL ADVERTISING MARKET ANALYSIS AND PREPARATION 8 Hrs

1.1 Advertising marketing market analysis

1.2 Marketing goal setting

1.3 Advertising creative planning

1.4 Advertising content creation

1.5 Advertising channel selection

1.6 Advertising account setup

2. SEARCH RANKING OPTIMIZATION 16 Hrs

2.1 Website traffic analysis

2.2 Web page search ranking analysis

2.3 Keyword analysis

2.4 Keyword mining

2.5 Search engine ranking process

2.6 Search engine ranking rules

2.7 Web content optimization

2.8 Web link optimization

2.9 Web keyword optimization

3. SEARCH BID MARKETING 16 Hrs

3.1 Search bid ranking advertising rules

3.2 Keyword addition and settings

3.3 Search engine creative editing

3.4 Audience bid adjustment

3.5 Search bid advertising placement

3.6 Unknown audience brand search engine promotion

3.7 Brand search engine promotion in awareness stage

3.8 Search bid marketing effect analysis

3.9 Search bid marketing effect optimization

4. RECOMMENDATION ENGINE MARKETING 16 Hrs

4.1 Content recommendation mechanism

4.2 Content recommendation rules

4.3 Content optimization execution

4.4 Recommendation engine advertising rules

4.5 Ad audience targeting

4.6 Recommendation engine creative editing and settings

4.7 Recommendation engine advertising placement

4.8 Recommendation engine advertising data analysis

4.9 Recommendation engine advertising data optimization

5. ADVERTISING EFFECT ANALYSIS AND COMPREHENSIVE APPLICATION 8 Hrs

5.1 Advertising effect analysis

5.2 Advertising effect evaluation

5.3 Advertising strategy optimization

Recommended textbooks:

A. The Art of SEO: Mastering Search Engine Optimization – 4th Edition (2023)

B. Digital Marketing Strategy: An Integrated Approach to Online Marketing – 2nd Edition (2023)

C. SEO 2023: Learn Search Engine Optimization with Smart Strategies – 1st Edition (2023)

D. SEO for Growth – 1st Edition (2016)

E. Strategic Digital Marketing: Modernizing 21st Century Business – 2nd Edition (2023)

MDT-263 DIGITAL ADVERTISING MARKETING

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND DIGITAL ADVERTISING MARKET ANALYSIS AND PREPARATION METHODS

1.1 Understand the basic methods of advertising marketing market analysis

1.2 Master the steps and strategies for setting marketing goals

1.3 Understand the principles and techniques of advertising creative planning

1.4 Learn the process and key points of advertising content creation

1.5 Familiarize yourself with the standards and strategies for advertising channel selection

1.6 Master the basic operations of advertising account setup

2. MASTER SEARCH RANKING OPTIMIZATION TECHNIQUES AND OPERATIONS

2.1 Understand the basic methods and tools for website traffic analysis

2.2 Learn the techniques and methods for webpage search ranking analysis

2.3 Master the methods and tools for keyword analysis

2.4 Familiarize yourself with the techniques and tools for keyword mining

2.5 Understand the search engine ranking process and rules

2.6 Learn how to optimize web-page content to improve rankings

2.7 Master the techniques and applications of web-page link optimization

2.8 Learn the techniques and practices of web-page keyword optimization

2.9 Understand and apply the core content of search engine ranking rules

3. MASTER SEARCH BID MARKETING OPERATION RULES AND OPTIMIZATION METHODS

3.1 Understand the rules and mechanisms of search bid ranking ads

3.2 Learn the specific methods and steps for adding and setting keywords

3.3 Master the techniques and strategies for search engine creative editing

3.4 Understand the application and techniques of target audience bid adjustment

3.5 Master the implementation process of search bid advertising placement

3.6 Learn how to conduct brand search engine promotion

3.7 Understand and apply brand promotion strategies in the awareness stage

3.8 Master the methods and techniques for analyzing search bid marketing effects

3.9 Learn the strategies and methods for optimizing search bid marketing effects

4. MASTER RECOMMENDATION ENGINE MARKETING PRINCIPLES AND PRACTICAL APPLICATIONS

4.1 Understand the working principles and processes of content recommendation mechanisms

4.2 Master the application and optimization techniques of content recommendation rules

4.3 Learn the methods and technologies for executing content optimization

4.4 Understand the application and creative settings of recommendation engine advertising rules

4.5 Master ad audience targeting strategies and techniques

4.6 Learn the methods for creative editing and settings in recommendation engines

4.7 Understand the strategies and methods for recommendation engine advertising placement

4.8 Learn the methods and tools for analyzing recommendation engine advertising data

4.9 Master the techniques and strategies for optimizing recommendation engine advertising data

5. MASTER ADVERTISING EFFECT ANALYSIS AND COMPREHENSIVE OPTIMIZATION APPLICATIONS

5.1 Understand the basic methods and tools for advertising effect analysis

5.2 Learn the techniques and standards for advertising effect evaluation

5.3 Master the methods and practices for advertising strategy optimization

MDT-263 DIGITAL ADVERTISING MARKETING

LIST OF PRACTICALS 96 Hrs

1. Analyze the product portfolio using the Boston Matrix method to evaluate market growth and relative share.
2. Visualize market share data using a three-dimensional space chart to assess competitive positioning.
3. Conduct a product life-cycle analysis to determine appropriate marketing strategies for each stage.
4. Perform a brand status analysis to evaluate brand equity and market perception.
5. Analyze competitors to identify strengths, weaknesses, opportunities, and threats.
6. Examine target audiences to define customer segments and behavioral patterns.
7. Set marketing objectives using the 5A model to align marketing goals with customer journey stages.
8. Select appropriate advertising creative display types to match campaign goals and audience preferences.
9. Design and create elements for advertising creative content to enhance message clarity and visual appeal.
10. Perform website traffic analysis to measure visitor behavior and source effectiveness.
11. Conduct keyword mining to identify high-value search terms for campaigns.
12. Categorize collected keywords to organize them into relevant marketing themes.
13. Determine core keywords and expand the keyword list to broaden campaign reach.
14. Cleanse and filter the keyword database to remove redundancies and improve accuracy.
15. Optimize web-page titles to improve search visibility and click-through rates.
16. Optimize web-page keyword tags to increase relevance and search ranking.
17. Revise and enhance web-page descriptions to improve discoverability and user engagement.
18. Set keyword bid prices to balance ad visibility and cost-efficiency.
19. Configure keyword match types to control ad reach and precision.
20. Design the logical structure for search engine marketing account setup to ensure organized campaign management.
21. Set time and geographic targeting parameters to maximize ad relevance and reach.
22. Select and bid on strategic keywords to launch optimized SEM campaigns.
23. Launch search engine marketing ads and monitor their performance in real time.**
24. Analyze branded search terms to evaluate brand recognition and search intent.
25. Create ad creatives aimed at building brand awareness among new (unknown) audiences.
26. Develop ad creatives designed to reinforce brand recognition among existing (known) audiences.

27. Analyze and plan information flow advertising channels to select optimal distribution platforms.
28. Set time and geographic targeting for information flow ads to increase campaign effectiveness.
29. Design the logic for information flow ad account setup to ensure efficient management and optimization.
30. Define targeting parameters based on basic audience demographics to refine reach.**
31. Define targeting criteria for audience interests and preferences to personalize content delivery.**
32. Define targeting criteria for audience behaviors to enhance ad relevance.**
33. Launch information flow ads and track performance metrics for continuous optimization.**
34. Analyze overall account performance data to evaluate campaign efficiency and ROI.
35. Examine marketing performance using keyword-level analysis to identify profitable terms.**
36. Review overall account performance data to identify trends and improvement areas.
37. Analyze advertising performance based on target audience dimensions to assess engagement and conversion effectiveness.**

MDT-273 LIVE STREAMING MARKETING

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**2**	**3**	**3**

AIMS: The aim of this module is to equip students with knowledge and skills of live streaming marketing. It focuses on enabling learners to conduct live product promotion, manage live broadcast rooms, engage with audiences in real time, and apply data analysis to optimize live streaming effectiveness. Students will also gain the ability to design live broadcast scripts, coordinate with technical staff, and apply compliance rules during live sessions. In the context of Pakistan, special emphasis will be placed on platforms such as, Facebook Live, Instagram Live, YouTube Live, and Daraz Live, as well as integration with e-commerce platforms and compliance with State Bank, SECP, and PEMRA regulations.

COURSE CONTENTS

1. LIVE STREAMING MARKETING FUNDAMENTALS 8 Hrs

1.1 Understand live streaming marketing

1.2 Types of live streaming platforms

1.3 Risk prevention and future trends in live streaming marketing

1.4 Industry analysis of live streaming marketing

1.5 Basic process of live streaming marketing activities

2. BUILDING A LIVE STREAMING MARKETING TEAM 12 Hrs

2.1 Organizational structure of different live streaming marketing teams

2.2 Job responsibilities and skill requirements for live streaming marketing team members

2.3 Team member configuration for live streaming marketing teams

2.4 Building a live streaming host

2.5 Strategies for selecting hosts for live streaming

2.6 Building a host assistant

3. PREPARING FOR LIVE STREAMING MARKETING 8 Hrs

3.1 Planning and executing a live streaming marketing campaign

3.2 Basic requirements and setup for live streaming venues

3.3 Configuring live streaming hardware and software setup

3.4 Planning the live streaming script

4. LIVE STREAMING MARKETING PRODUCT PLANNING 8 Hrs

4.1 Product selection and testing for live streaming

4.2 Developing products for live streaming

4.3 Pricing products for live streaming

4.4 Display methods for products in the live streaming room

4.5 Product arrangement in the live streaming room

4.6 Display methods for standard and non-standard products

5. LIVE STREAMING MARKETING PROMOTION 8 Hrs

5.1 Overview of live streaming marketing promotion

5.2 Pre-event promotion for live streaming

5.3 Content design for driving traffic to live streaming

5.4 Paid promotion on live streaming platforms and social commerce platforms

6. LIVE STREAMING ROOM MARKETING MANAGEMENT 12 Hrs

6.1 Designing marketing scripts for live streaming

6.2 Live streaming marketing scripts

6.3 Promotional techniques for live streaming

6.4 Managing the atmosphere in the live streaming room

6.5 Live streaming marketing techniques

7. LIVE STREAMING MARKETING DATA ANALYSIS AND REVIEW 8 Hrs

7.1 Overview of data analysis

7.2 Data analysis methodology for live streaming

7.3 Key data analysis metrics

7.4 Reviewing and optimizing live streaming marketing performance

Recommended textbooks:

A. Live Streaming Is Smart Marketing – 1st Edition (2019)

B. The Live-Streaming Handbook – 1st Edition (2017)

C. Social Media Marketing Live – 1st Edition (2019)

D. The Business of Live Streaming – 1st Edition (2019)

E. 100 Livestreaming & Digital Media Predictions – 1st Edition (2021)

MDT-273 LIVE STREAMING MATKETING

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE FUNDAMENTALS OF LIVE STREAMING MARKETING

1.1 Understand the basic concepts and scope of live streaming marketing

1.2 Familiarize yourself with different types of global live streaming platforms

1.3 Master risk prevention measures and future development trends

1.4 Understand the current status of the live streaming marketing industry

1.5 Familiarize yourself with the basic process of live streaming marketing activities

2. FAMILIARIZE WITH LIVE STREAMING MARKETING TEAM BUILDING REQUIREMENTS

2.1 Understand the organizational structure of live streaming teams

2.2 Master the responsibilities and skills of various roles in live streaming teams

2.3 Learn how to rationally configure the personnel structure of a live streaming marketing team

2.4 Understand how to build an attractive host image

2.5 Master strategies for selecting the right hosts for live streaming

2.6 Familiarize yourself with methods for building host assistants

3. MASTER THE PREPARATION PROCESS FOR LIVE STREAMING MARKETING ACTIVITIES

3.1 Plan and execute live streaming marketing campaigns

3.2 Understand general setup requirements for live streaming venues

3.3 Configure live streaming hardware and software

3.4 Plan live streaming scripts

4. MASTER PRODUCT PLANNING SKILLS IN LIVE STREAMING MARKETING

4.1 Select and test products for live streaming

4.2 Learn how to create/choose products that meet live streaming marketing needs

4.3 Apply pricing strategies for live streaming products

4.4 Understand product display methods in the live streaming room

4.5 Optimize product arrangement in the live streaming room

4.6 Apply display methods for standard and non-standard products

5. MASTER PROMOTION METHODS IN LIVE STREAMING MARKETING

5.1 Understand the definition and types of live streaming promotion

5.2 Apply pre-event promotion and traffic generation techniques

5.3 Design content for driving traffic to live streaming

5.4 Master paid promotion strategies on general/global platforms

6. MASTER MARKETING MANAGEMENT TECHNIQUES IN THE LIVE STREAMING ROOM

6.1 Design live streaming marketing scripts

6.2 Familiarize yourself with live streaming marketing scripts for different scenarios

6.3 Apply live streaming promotional methods

6.4 Manage the atmosphere in the live streaming room

6.5 Master common live streaming marketing techniques

7. MASTER DATA ANALYSIS AND POST-EVENT REVIEW METHODS IN LIVE STREAMING MARKETING

7.1 Understand the definition and types of data analysis in live streaming marketing

7.2 Apply live streaming data analysis methodology

7.3 Identify and interpret key data analysis metrics

7.4 Perform post-event review and optimization adjustments for live streaming

MDT-273 LIVE STREAMING MARKETING

LIST OF PRACTICALS 96 Hrs

1. Watch different types of live streaming videos and record marketing characteristics
2. Select two live streaming platforms relevant, analyze user groups and features, and create a comparison table
3. Develop a live streaming risk prevention plan and design emergency response measures during live streams
4. Collect general/global policies related to live streaming marketing and analyze industry trends
5. Simulate a live streaming marketing activity, designing and rehearsing the complete process from preparation to post-event review
6. Design the live streaming team structure, draw the team chart and explain the roles and responsibilities of each position
7. Write a job responsibility table for each role in the live streaming team
8. Simulate team personnel configuration for different live streaming activity scales
9. Simulate a live streaming scene: design host scripts and manage host expressions
10. Establish criteria for selecting live-stream hosts, conduct a host selection simulation, and evaluate candidate suitability based on performance and audience appeal.
11. Define the responsibilities of host assistants and simulate their support tasks during live streams to assess coordination and effectiveness.
12. Write a live streaming marketing plan, based on set goals and budgets
13. Set up the live streaming venue with integration of e-commerce platforms, arranging the venue and configuring equipment
14. Debug and configure live streaming equipment and software
15. Write a live streaming script, including time planning, interaction sections, and content rehearsal
16. Conduct live product selection based on user needs and market research
17. Design product highlights, write promotional copy, and simulate live presentation
18. Set product pricing strategies using market data and consumer psychology
19. Design product display arrangements in the live stream room
20. Configure product combinations and compare effectiveness
21. Simulate display methods for standardized vs. non-standardized products
22. Develop a live streaming promotion plan and write promotional content
23. Design a pre-event promotional activity and simulate social media campaigns

24. Write live stream traffic-driving content and practice execution

25. Simulate paid promotion on live streaming/social commerce platforms and analyze effectiveness

26. Write live streaming scripts for different scenarios and rehearse them

27. Design live promotional techniques and simulate practical operations

28. Manage the atmosphere in the live streaming room through interactive methods

29. Apply different live streaming marketing strategies for various scenarios

30. Collect live streaming data and analyze with data tools

31. Design a live streaming data analysis plan and prepare a report

32. Use tools (Google Analytics, Daraz Seller Center) to measure conversion, watch time, and engagement rate

33. Conduct a live stream review and optimization based on analysis

34. Practice a live stream on an e-commerce platform (Daraz, Shopify) and analyze marketing effects

35. Conduct a live streaming marketing event on a social media platform (Facebook, Instagram, YouTube) and perform a post-event review

3rd year

DAE

IN

MARKETING（SPECIALIZATION IN DIGITAL MARKETING)

خصوصی مقاصد:

() احادیث کا ترجمہ بیان کر سکے

() احادیث کی تشریح کر سکے

() معاشرتی اور انفرادی زندگی میں احادیث سے رہنمائی حاصل کر سکے

حقوق وفرائض:

عمومی مقاصد:

() اسلامی معاشرے کا ایک اچھا فرد بن سکے

خصوصی مقاصد:

() والدین کے حقوق وفرائض بیان کر سکے

() ہمسائیوں کے حقوق بیان کر سکے

() بچوں کے حقوق بیان کر سکے

() عورتوں کے حقوق کی پاسداری کر سکے

() بزرگ شہریوں کے حقوق کا خیال رکھ سکے

() مخنث حضرات کے حقوق جان سکے اور ان کے حقوق کی پاسداری کر کے انہیں معاشرے کا ایک مفید فرد بنایا جا سکے

() اسلام میں حقوق وفرائض کی آگاہی کی صورت میں اپنے اندر خدمت خلق کا جذبہ پیدا کر سکے

اسلامی اقدار:

عمومی مقاصد:

() طالب علم جان سکے گا کہ تعلیم کا مقصد حسن اخلاق سے متصف ہونا ہے

خصوصی مقاصد:

() اخلاق کے معنی ومفہوم کو بیان کر سکے

() اسلام میں حسن واخلاق کی اہمیت بیان کر سکے

() قرآن وسنت کی روشنی میں صبر واستقلال کی اہمیت بیان کر سکے

() ایفائے عہد کی اہمیت بیان کر سکے

() اخوت کے معنی ومفہوم بیان کر سکے

() اخوت اسلامی کی اہمیت بیان کر سکے

نصاب (سال سوئم)

GEN 301

ٹی	پی	سی
1	0	1

کل وقت 12 گھنٹے

مطالعہ پاکستان

حصہ دوئم

موضوعات:

- () قیام پاکستان
- () باؤنڈری کمیشن
- () ریڈکلف ایوارڈ
- () تقسیم بنگال
- () تقسیم پنجاب
- () مسئلہ مہاجرین
- () ریاست کا الحاق
- () ریاست جموں کشمیر
- () نہری پانی کا تنازعہ
- () قرارداد پاکستان
- () علماء کے بائیس نکات
- () 1956-1962-اور 1973 کے دساتیر کی اسلامی/انسانی حقوق کی دفعات (8تا28)۔
- () اقلیتوں کے حقوق۔دیگر محروم طبقات کے حقوق
- () پاکستان کا محل وقوع اور اسکی جغرافیائی اہمیت۔+GSP کا تعارف اور عملی طریقہ کار
- () قدرتی وسائل (تیل، گیس، کوئلہ)

غیر مسلم طلباء کے لیے

نصاب اخلاقیات

GEN3101

سال سوئم

ٹی	پی	سی
1	0	1

کل وقت 20 گھنٹے

موضوعات:

() احساس ذمہ داری

() مثبت ذہن

() عدل وانصاف

() قومی خدمت کا جذبہ

() ذکر ونظر کی پاکیزگی

() احترام آدمیت

() شائستگی

() عفوودرگذر

() بردباری

() خودانحصاری

() اثر ونفوذ

() جامعیت

() اپنی ذات کی معرفت (بذریعہ ہم عمر طلباء، اساتذہ، اہم شخصیات)

() بچوں کے حقوق

() عورتوں کے حقوق

() بزرگ شہریوں کے حقوق

() مخنث حضرات کے حقوق

غیر مسلم طلباء کے لیے

نصاب اخلاقیات (سال سوئم)

تدریس مقاصد:

عمومی مقاصد:

() ملکی ترقی کے لیے اعلیٰ اوصاف کے ساتھ بہتر طور پر ملک وملت کی خدمت کر سکے

خصوصی مقاصد: طالب علم اس قابل ہو سکے کہ

() موضوعات کا مطلب بیان کر سکے

() عملی زندگی سے مثالوں کی نشاندہی کر سکے

() موضوعات کی اہمیت بیان کر سکے

() اپنی شخصیت اور معاشرے پر موضوعات کے مطابق اثرات پیدا کرنے کے طریقے بیان کر سکے

() مثبت ذہن کے ساتھ کام کر سکے

() عدل وانصاف سے ادارہ میں، دفتر میں بہتر ماحول پیدا کر سکے

() ماحول کو اخلاقی طور پر پاکیزہ بنائے

() کارکنوں کی بہتر طور پر دل جوئی کر سکے

() کارکردگی میں اضافہ کر سکے

() باہمی احترام کی برکات سے استفادہ کر سکے

() بچوں کے حقوق بیان کر سکے

() عورتوں کے حقوق کی پاسداری کر سکے

() بزرگ شہریوں کے حقوق کا خیال رکھ سکے

() مخنث حضرات کے حقوق جان سکے اور ان کے حقوق کی پاسداری کر کے انہیں معاشرے کا ایک مفید فرد بنایا جا سکے

MDT-311 BUSINESS CULTURE

Total Contact Hours	**T**	**P**	**C**
Theory 32 Hrs	**1**	**0**	**1**

AIMS: This course aims to cultivate students' comprehensive cognitive ability of international business culture and cross-cultural business practice ability in the context of globalization, to help students cope with the problems of institutional conflict and integration in international business activities, and to enhance their business culture literacy and international business vision.

COURSE OUTLINE

1. BUSINESS HISTORY AND CULTURE 4Hrs

1.1 Origins of commerce and commercial civilization

1.2 Business in the modern period

1.3 Business in the era of Artificial Intelligence and Data Economy

1.4 Sustainable and Green Business Transformation

2. GLOBAL TRADE NETWORKS 4 Hrs

2.1 Land Silk Road

2.2 Maritime Trade Corridor

2.3 Global E-Commerce and Digital Trade Platforms

2.4 Blockchain and Smart Logistics in Global Trade

3. BUSINESS MATERIAL CULTURE 8 Hrs

3.1 Food Culture

3.2 Catering Culture

3.3 Wine culture

3.4 Tea Culture

3.5 Wellness, Healthcare & Nutraceutical Business Culture

3.6 Folk Craft Culture

3.7 Fashion, Lifestyle & Digital Consumer Goods Culture

4. BUSINESS INSTITUTIONAL CULTURE 8 Hrs

4.1 Contract culture

4.2 Business legal system

4.3 Business organization system culture

4.4 Industry practice and credit system

4.5 Regulatory System and Social Supervision

4.6 Global Governance, ESG Compliance & Ethical Trade Systems

4.7 Cybersecurity, Data Privacy & Digital Business Laws

5. BUSINESS SPIRITUAL CULTURE 8Hrs

5.1 Traditional Business Ethics

5.2 Entrepreneurial Spirit Traits

5.3 Brand Culture and Spirit

5.4 Business Sustainability and Human-Centered Innovation

5.5 Digital Leadership and Corporate Social Responsibility

Recommended textbook

A. The History of Business in the Modern World – 1st Edition (2018)

B. Global Trade and Business Networks – 2nd Edition (2021)

C. Business Culture: Managing Across Borders – 3rd Edition (2020)

D. Sustainable Business: Concepts, Methodologies, Tools, and Applications – 1st Edition (2022)

MDT-311 BUSINESS CULTURE

INSTRUCTIONAL OBJECTIVE

1. BUSINESS HISTORY AND CULTURE

1.1 To understand the origins of commerce and its early history

1.2 To understand the key stages and characteristics of modern business transformation

1.3 Understand the disruptive impact of digital technology, AI, and blockchain on business models

1.4 It's vital to foster a formal sense of social responsibility, embedding environmental protection and social accountability into all business phases, to achieve a sustainable "environment-society-economy" win-win.

2. GLOBAL TRADE NETWORKS

2.1 Understand the role of the Land Silk Road in facilitating trans-regional trade and Commerce

2.2 Analyze the impact of maritime trade corridors on the globalization process

2.3 To grasp the operational logic and innovative value of the modern supply chain Revolution

2.4 Analyze the impact of e-commerce, digital trade platforms, and global logistics networks on international trade

3. COMMERCIAL MATERIAL CULTURE

3.1 To grasp the symbolic significance of food culture in commercial communication

3.2 Understand the relationship between the development of catering industry and regional Culture

3.3 Analyze the social function and commercial value of wine culture

3.4 To interpret the carrier role of tea culture in cross-cultural trade

3.5 Wellness, Healthcare & Nutraceutical Business Culture focuses on promoting health and well-being through medical services, preventive care, and nutrition-based products that support a healthier lifestyle.

3.6 Exploring the industrial transformation potential of folk craft culture

3.7 Fashion, Lifestyle & Digital Consumer Goods Culture represents the evolving market where style, personal identity, and everyday products are shaped by digital platforms, trends, and consumer experiences.

4. COMMERCIAL INSTITUTIONAL CULTURE

4.1 To grasp the fundamental role of contractual spirit in commercial activities

4.2 Understand the normative function of the commercial legal system on the market order

4.3 Analyze the interactive relationship between business organization system and culture shaping

4.4 Understand the practical application scenarios of industry practice and credit system

4.5 Recognize the checks and balances of the regulatory system and social supervision mechanism.

4.6 Global Governance, ESG Compliance & Ethical Trade Systems emphasize international frameworks that ensure responsible business practices by aligning with environmental, social, and governance standards to promote fair, transparent, and sustainable trade.

4.7 Cybersecurity, Data Privacy & Digital Business Laws safeguard digital assets, personal information, and online business operations through legal and technological protections.

5. BUSINESS SPIRITUAL CULTURE

5.1 Understand the core values of traditional business ethics

5.2 Understand the cultivation path of entrepreneurial innovation and responsibility

5.3 Master the core methodology of brand culture construction and dissemination.

5.4 Business Sustainability and Human-Centered Innovation integrate eco-friendly practices with solutions designed around human needs and values.

5.5 Digital Leadership and Corporate Social Responsibility combine technology-driven vision with ethical practices that benefit society and stakeholders.

MDT-322 MARKETING AND PLANNING

Total Contact Hours

Theory 32 Hrs	**T**	**P**	**C**
Practical 96 Hrs	**1**	**3**	**2**

AIMS: This course aims to equip students with the essential theories and practical skills in marketing planning. The content covers core concepts in marketing planning, creative methods, corporate marketing strategy planning, and integrated marketing communication planning. Through practical case studies and project training, students will learn to develop marketing strategies, conduct brand promotion and market analysis, and be capable of independently creating marketing plans and proposals, laying a solid foundation for a career in marketing planning.

COURSE CONTENTS

1. OVERVIEW OF MARKETING PLANNING 4 Hrs

1.1 Meaning and development of marketing planning

1.2 Principles of marketing planning

1.3 Business in the era of Artificial Intelligence (AI) and Data Economy refers to the transformation of traditional business models, operations, and decision-making processes

1.4 Methods of marketing planning

1.5 Organization and responsibilities in marketing planning

1.6 Role of marketing planning in business development

1.7 Digital Analytics Tools and AI-driven Marketing Planning

2. CREATIVITY AND METHODS IN MARKETING PLANNING 4 Hrs

2.1 Techniques for idea generation

2.2 Brainstorming and mind mapping

2.3 Application of differentiation strategy

2.4 Reverse thinking and unconventional strategies

2.5 Cross-industry collaboration and resource integration

2.6 Use of AI, AR/VR and Digital Creative Platforms

2.7 Creative evaluation and testing methods

2.8 Design Thinking and Customer-Centric Innovation

3. ENTERPRISE MARKETING STRATEGY PLANNING 4 Hrs

3.1 Concept and significance of enterprise marketing strategy

3.2 Types of marketing strategies

3.3 Marketing environment analysis and strategic positioning

3.4 Brand building and brand strategy

3.5 Long-term development plans and short-term goal setting

3.6 Competitor strategy analysis and competitive strategy formulation

3.7 Market entry and expansion strategies

3.8 Marketing budget allocation and optimization strategy

3.9 Digital Risk Management, Cybersecurity & Crisis Communication

3.10 Sustainability and ESG-driven Marketing Strategies

4. SPECIFIC CONTENT OF MARKETING PLANNING 8 Hrs

4.1 Product strategy planning

4.2 Pricing strategy planning

4.3 Channel strategy planning

4.4 Omnichannel & Digital Promotion Strategy

4.5 Brand building strategy

4.6 Public relations event planning

4.7 Customer relationship management planning

4.8 Digital Supply Chain & E-commerce Integration

4.9 Data-Driven Personalization and Customer Experience Planning

5. INTEGRATED MARKETING COMMUNICATION PLANNING 8 Hrs

5.1 Integrated marketing communication theory

5.2 Elements and stages of marketing communication

5.3 Classic paradigms of marketing communication

5.3 Digital-first and AI-driven Communication Models

5.4 Communication goals and audience targeting

5.5 Integration of communication channels and media selection

5.6 Consistency of information and brand tone maintenance

5.7 Interactive communication and social media utilization

5.8 Integrated marketing data analysis and communication effectiveness evaluation

5.8 Marketing Analytics, Big Data & ROI Measurement

5.9 Influencer & Community-based Communication Strategies

6. WRITING MARKETING PLANS 4 Hrs

6.1 Purpose of a marketing plan

6.2 Marketing plan models and examples

6.3 Agile and Dynamic Formats for Digital Marketing Plans

6.4 Writing techniques for marketing plans

6.5 AI-assisted Tools for Marketing Plan Development

Recommended textbook:

A. Marketing Management – 16th Edition (2021) by Philip Kotler & Kevin Keller

B. Strategic Marketing Planning: Theory and Practice – 3rd Edition (2020)

C. Digital Marketing Strategy: An Integrated Approach to Online Marketing – 2nd Edition (2023)

D. Marketing Plans: How to Prepare Them, How to Use Them – 8th Edition (2019)

E. Integrated Marketing Communication: Creative Strategy from Idea to Implementation – 3rd Edition (2021)

MDT-322 MARKETING AND PLANNING

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE BASIC CONCEPTS AND DEVELOPMENT OF MARKETING PLANNING

1.1 Understand the meaning and development of marketing planning

1.2 Understand the basic principles of marketing planning

1.3 Understand the role of Artificial Intelligence (AI) and the data economy in transforming traditional business models, operations, and decision-making processes of enterprises, thereby driving efficiency, innovation, and data-driven growth.

1.4 Master commonly used methods in marketing planning

1.5 Understand the organization and personnel responsibilities in marketing planning

1.6 Understand the role of marketing planning in business development

1.7 Be well-acquainted with the tools and technologies utilized in marketing planning, such as digital analytics tools and artificial intelligence (AI) tools..

1.8 Master the basic concepts and implementation steps of marketing planning

2. MASTER THE CREATIVITY AND METHODS IN MARKETING PLANNING

2.1 Master techniques for stimulating creativity

2.2 Learn to use brainstorming and mind mapping methods

2.3 Understand the application of differentiation strategies

2.4 Master the use of reverse thinking and unconventional strategies

2.5 Familiarize with methods for cross-industry collaboration and resource integration

2.6 Use of AI, AR/VR and Digital Creative Platforms to enhance brand creativity and deliver immersive consumer experiences.

2.7 Able to evaluate and test the effectiveness of creative proposals

2.8 Design Thinking and Customer-Centric Innovation to solve problems creatively and align solutions with customer needs.

3. UNDERSTAND THE BASIC FRAMEWORK AND APPLICATION OF ENTERPRISE MARKETING STRATEGY PLANNING

3.1 Understand the concept and importance of enterprise marketing strategy

3.2 Familiarize yourself with the main types of enterprise marketing strategies

3.3 Learn to conduct marketing environment analysis and strategic positioning

3.4 Master brand building and brand strategy formulation

3.5 Understand how to formulate long-term development plans and short-term goals

3.6 Able to conduct competitor strategy analysis and formulate competitive strategies

3.7 Understand the application of market entry and expansion strategies

3.8 Learn to allocate and optimize marketing budgets

3.9 Digital Risk Management, Cybersecurity & Crisis Communication to protect brand reputation and ensure business resilience in digital environments.

3.10 Sustainability and ESG-driven Marketing Strategies to promote responsible practices and strengthen brand trust through ethical impact.

4. MASTER THE SPECIFIC CONTENT AND IMPLEMENTATION METHODS OF MARKETING PLANNING

4.1 Understand product strategy planning and implementation

4.2 Master the formulation and application of pricing strategies

4.3 Learn to plan and manage channel strategies

4.4 Master the design and implementation of promotional mix strategies

4.5 Understand the key elements of brand building strategies

4.6 Learn how to plan and execute public relations events

4.7 Understand the goals and methods of customer relationship management planning

4.8 Digital Supply Chain & E-commerce Integration to streamline operations and enhance customer experience through technology.

4.9 Data-Driven Personalization and Customer Experience Planning to deliver tailored interactions and improve customer satisfaction.

5. MASTER THE KEY ELEMENTS AND TECHNIQUES OF INTEGRATED MARKETING COMMUNICATION PLANNING

5.1 Understand the basic theory of integrated marketing communication

5.2 Familiarize yourself with the elements and stages of marketing communication

5.3 Understand the classic paradigms and applications of marketing communication

5.4 Learn how to set communication goals and audience targeting

5.5 Master the integration of communication channels and media selection

5.6 Understand techniques for maintaining consistency of information and brand tone

5.7 Familiarize yourself with interactive communication and social media utilization

5.8 Marketing Analytics, Big Data & ROI Measurement to evaluate performance and maximize returns through data-driven insights.

5.9 Influencer & Community-based Communication Strategies to build authentic engagement and strengthen brand loyalty.

6. MASTER THE WRITING TECHNIQUES FOR MARKETING PLANS

6.1 Understand the purpose and importance of marketing plans

6.2 Learn marketing plan models and examples

6.3 Agile and Dynamic Formats for Digital Marketing Plans to adapt quickly to market changes and optimize campaign effectiveness.

6.4 Master the writing techniques and precautions for marketing plans

6.5 AI-assisted Tools for Marketing Plan Development to automate insights and enhance strategic decision-making.

MDT-322 MARKETING AND PLANNING

LIST OF PRACTICALS 96 Hrs

1. Analyze a successful social media marketing case of a cosmetics brand

2. Analyze a case of AI-powered digital marketing transformation and strategy implementation of a new energy vehicle brand

3. Analyze a digital-first market penetration and customer retention case of a fast-moving consumer goods (FMCG) brand

4. Analyze an omnichannel e-commerce platform promotional campaign of a clothing brand

5. Analyze a cross-industry co-branding and experiential marketing case of a trendy brand

6. Analyze an emerging market entry using digital localization strategy case

7. Analyze an innovative product launch using AR/VR or immersive media promotion case

8. Analyze a brand development strategy case of an emerging brand

9. Analyze at least one successful cross-cultural digital marketing campaign and extract its key success factors

10. Design a pricing strategy for a specified company based on market positioning

11. Select and apply an appropriate AI-assisted pricing model for a specified product in alignment with the chosen marketing strategy.

12. Analyze the current distribution channel status using data analysis

13. Design a distribution channel model that fits market demand based on the company's development status

14. Design a promotional theme for a company based on local festivals and target audience needs

15. Plan a phygital (online + offline) promotional event with customer engagement tools and write a plan

16. Plan a marketing campaign for a brand on an e-commerce platform and write a plan

17. Develop a membership system and loyalty enhancement plan for an FMCG brand

18. Develop and write an internationalization branding strategy for a company

19. Plan and write an integrated marketing communication strategy for a food company

19. Plan and write an integrated marketing communication strategy for a food-tech / online delivery platform

20. Plan and write an integrated marketing communication strategy for an agri-tech / smart farming company

21. Plan and write an integrated marketing communication strategy for a cosmetics company using social commerce

22. Plan and write an integrated marketing communication strategy for a digital product or SaaS-based company

MDT-333 BRAND PLANNING AND PROMOTION

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**2**	**3**	**3**

AIMS: This course aims to help students master the basic theories and practical skills of brand planning and promotion. Through studying brand recognition, positioning, image planning, development planning, event promotion, and advertising promotion, students will be able to independently conduct brand analysis and planning, enhance brand value and market influence, and develop the ability to engage in brand planning and promotion.

COURSE CONTENTS

1. BRAND RECOGNITION 8 Hrs

1.1 Concept and connotation of brand

1.2 Origin of the brand

1.3 The role of the brand

1.4 Elements of a brand

1.5 Brand Architecture & Ecosystem (Parent, Sub, Endorsed Brands)

1.6 Brand Experience & Consumer Engagement

2. BRAND ANALYSIS AND POSITIONING 8 Hrs

2.1 Macro environment analysis of the brand

2.2 Micro environment analysis of the brand

2.3 Brand equity evaluation

2.4 Product-oriented brand positioning

2.5 Consumer-oriented brand positioning

2.6 Data-driven & AI-powered Brand Positioning

2.7 Sustainability & ESG-based Brand Positioning

3. BRAND IMAGE PLANNING 16 Hrs

3.1 Brand name planning

3.2 Brand logo planning

3.3 Brand slogan planning

3.4 Brand story planning

3.5 Brand personality planning

3.6 Product packaging planning

3.7 Brand visual and textual planning

3.8 Social Media, Influencer & Content Creator Planning

3.9 Digital-First Brand Identity & Omni-Channel Presence

3.10 Brand offline terminal image planning

3.11 Brand Experience Design (AR/VR, Metaverse, Immersive Media)

4. BRAND DEVELOPMENT PLANNING 8 Hrs

4.1 Brand development goal setting

4.2 Brand extension

4.3 Brand market expansion

4.4 E-commerce & Digital Marketplace Expansion

4.5 Brand promotion planning

4.6 Co-branding & Strategic Partnerships

5. BRAND EVENT PROMOTION 12 Hrs

5.1 Brand event form setting

5.2 Brand event timing setting

5.3 Brand event theme setting

5.4 Brand event publicity planning

5.5 Brand event cost management

5.6 Brand event implementation management

5.7 Data Analytics & ROI Measurement for Brand Events

5.8 Hybrid & Virtual Event Promotion Strategies

6. BRAND ADVERTISING PROMOTION 12 Hrs

6.1 Brand advertising format setting

6.2 Brand advertising content creation

6.3 Omnichannel media selection for advertising placement

6.4 Brand advertising targeted placement using data analytics and audience segmentation

6.5 Brand advertising budget management with real-time performance optimization

6.6 Brand advertising effectiveness evaluation using ROI measurement and attribution modeling

Recommended textbook:

A. Strategic Brand Management – 5th Edition (2020) by Kevin Lane Keller

B. Brand Management: Research, Theory and Practice – 2nd Edition (2019)

C. Building Strong Brands – 1st Edition (2016) by David A. Aaker

D. Branding: In Five and a Half Steps – 1st Edition (2017) by Michael Johnson

E. Digital Branding: A Complete Step-by-Step Guide to Strategy, Tactics and Measurement – 2nd Edition (2021)

MDT-333 BRAND PLANNING AND PROMOTION

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND BRAND BASICS

1.1 Understand the concept and connotation of a brand

1.2 Understand the origin of a brand

1.3 Understand the role of a brand

1.4 Understand the elements that constitute a brand

1.5 Understand brand architecture & ecosystem (Parent, Sub, Endorsed Brands) – to organize brand hierarchy and clarify roles within the overall portfolio.

1.6 Understand brand experience & consumer engagement to create memorable interactions and foster strong customer relationships.

2. MASTERS OF BRAND ANALYSIS AND POSITIONING METHODS

2.1 Master macro-environmental analysis methods and dimensions for a brand

2.2 Master micro-environmental analysis methods and dimensions for a brand

2.3 Master brand equity evaluation methods

2.4 Ability to position a brand from a product perspective

2.5 Ability to position a brand from a consumer perspective

2.6 Data-driven & AI-powered Brand Positioning to optimize market fit through insights and intelligent analytics.

2.7 Sustainability & ESG-based Brand Positioning to build trust and align brand image with ethical, social, and environmental values.

3. MASTERS OF BRAND IMAGE PLANNING PRINCIPLES AND METHODS

3.1 Ability to plan a brand name

3.2 Ability to plan a brand logo

3.3 Ability to plan a brand slogan

3.4 Ability to plan a brand story

3.5 Ability to plan a brand personality

3.6 Ability to plan product packaging

3.7 Ability to plan brand visuals and text

3.8 Ability to expand brand reach and elevate user engagement through social media, influencer, and content creator programs..

3.9 Ability to design brand experiences that create interactive and immersive brand interactions for consumers

3.10 Ability to plan a brand's offline terminal image

3.11 Brand Experience Design (AR/VR, Metaverse, Immersive Media) to create interactive and immersive brand interactions for consumers.

4. MASTERS OF BRAND DEVELOPMENT PLANNING PRINCIPLES AND METHODS

4.1 Ability to set reasonable brand development goals

4.2 Ability to plan brand extension

4.3 Ability to plan brand market expansion

4.4 Ability to plan brand channel expansion

4.4 E-commerce & Digital Marketplace Expansion to scale brand growth through online sales channels and global reach.

4.5 Ability to plan brand promotion

4.6 Ability to expand brand scale by leveraging e - commerce and digital marketplaces to broaden sales channels and achieve global reach.

5. MASTERS OF BRAND EVENT PROMOTION PROCESS AND METHODS

5.1 Ability to define brand event formats

5.2 Ability to define brand event timing

5.3 Ability to define brand event themes

5.4 Ability to plan brand event publicity

5.5 Ability to manage brand event costs

5.6 Ability to manage the implementation of brand events

5.7 Ability to analyze brand activity data and measure ROI to assess activity results and improve future brand spending

5.8 Ability to expand audience scope and boost participation using a mix of digital and in - person event styles

6. MASTERS OF BRAND ADVERTISING PROMOTION PROCESS AND METHODS

6.1 Ability to define brand advertising formats

6.2 Ability to create brand advertising content

6.3 Ability to select media for advertising placement, including digital, social, and programmatic platforms to optimize reach and deliver consistent brand messaging across channels.

6.4 Ability to implement targeted brand advertising placement

6.4 Ability to perform brand ad placement and enhance activity results via data analysis and audience

6.5 Ability to maximize ROI through real - time, efficient allocation and tracking of ad budgets.

6.6 Ability to assess ad campaign influence and refine future tactics via ROI calculation and attribution modeling

MDT-333 BRAND PLANNING AND PROMOTION

LIST OF PRACTICALS 96 Hrs

1. **Conduct** a macro-environmental analysis of a brand using the PEST model to **evaluate political, economic, social, and technological influences.**
2. **Perform** a competitive environmental analysis of a brand using the SWOT model to **identify strengths, weaknesses, opportunities, and threats.**
3. **Analyze** the consumer market using **data-driven segmentation and consumer insight tools** to **understand audience behavior and preferences.**
4. **Assess** brand equity using the **Five-Star Model** to **evaluate brand strength and performance.**
5. **Evaluate** brand equity through **Keller's CBBE (Customer-Based Brand Equity) model** to **determine brand resonance and customer perceptions.**
6. **Measure** brand value based on **financial factors** to **assess profitability and market worth.**
7. **Measure** brand value based on **consumer perception and loyalty factors** to **determine emotional and experiential brand value.**
8. **Analyze** brand equity using **advanced digital metrics and AI-based brand tracking tools** to **monitor brand performance over time.**
9. **Develop** brand positioning using **perceptual mapping** to **visualize market placement and differentiation.**
10. **Determine** brand positioning using **AI-powered sentiment analysis and competitor mapping** to **refine strategic positioning.**
11. **Design** brand personality elements, including **names, slogans, and brand stories**, suitable for different types of companies.**
12. **Create** brand image design elements such as **logos, color schemes, and merchandise** to **enhance visual identity.**
13. **Design** a **responsive brand website** and **mobile-first interface** to **improve user experience and accessibility.**
14. **Develop** the visual and functional **image of the brand's e-commerce store** to **ensure consistency and appeal.**
15. **Design** the **brand's social media image** to **maintain consistency across digital platforms.**
16. **Plan** and **design** an **omnichannel retail and experiential store layout** to **integrate online and offline brand experiences.**
17. **Develop** a **phygital (physical + digital) brand space** to **create immersive brand experiences.**
18. **Set** measurable **brand development goals** aligned with long-term strategic objectives.**
19. **Define** key performance indicators (KPIs) to **track progress in brand development and marketing performance.**

20. **Analyze** the **brand product matrix** to **evaluate portfolio balance and growth opportunities.**
21. **Plan** brand extension strategies to **introduce new products under existing brand equity.**
22. **Develop** brand expansion strategies to **enter new markets or customer segments.**
23. **Plan** content for **brand events** to **communicate brand values and engage audiences.**
24. **Design** publicity plans for brand events to **maximize awareness and participation.**
25. **Develop** and **control** brand event budgets to **ensure cost-effective execution.**
26. **Implement** and **monitor** brand event operations to **ensure smooth execution and audience engagement.**
27. **Analyze** brand event performance and **propose optimization strategies** for future improvements.**
28. **Plan** brand advertising formats using **AI-driven creative tools** to **enhance design efficiency and targeting accuracy.**
29. **Create** brand promotion **posters and digital banners** for omnichannel marketing to **ensure visual consistency.**
30. **Develop** brand storytelling and **create engaging content** for blogs, social media, and digital PR campaigns.**
31. **Produce** short brand promotion videos for industries such as **food or daily necessities** to **increase digital reach.**
32. **Plan** and **execute** brand advertising placement across platforms to **maximize visibility and ROI.**
33. **Manage** the brand advertising budget to **ensure efficient allocation and spending.**
34. **Analyze** and **optimize** brand advertising performance using **ROI and attribution modeling** to **improve campaign outcomes.**

MDT-343 BUSINESS DATA ANALYSIS AND APPLICATION

Total Contact Hours

Theory	**64 Hrs**	**T**	**P**	**C**
Practical	**96 Hrs**	**2**	**3**	**3**

AIMS: Through this course, students will master the fundamental knowledge and skills of business data analysis, become familiar with the processes and methods of analyzing business operation data, and develop the ability to optimize business operations and marketing strategies through data-driven decision-making. This will enhance the scientific and effective nature of business decision-making.

COURSE CONTENTS

1. OVERVIEW OF BUSINESS DATA ANALYSIS 8 Hrs

1.1 Understand data analysis

1.2 Data analysis process

1.3 Defining the analysis approach

1.4 Data preparation

1.5 Data processing

1.6 Data exploration and statistical analysis

1.7 Data visualization & interactive presentation

1.8 Preparing actionable data analysis reports

1.9 Management of data analysis department operations

2. MARKET ANALYSIS 4 Hrs

2.1 Industry analysis

2.2 Competitive analysis

2.3 Learn digital market intelligence tools and trend analysis

3. ONLINE STORE TRAFFIC ANALYSIS 6 Hrs

3.1 Traffic analysis metrics

3.2 Traffic source analysis

3.3 Customer journey & visit quality analysis

3.4 Traffic conversion analysis

4. OFFLINE STORE CUSTOMER FLOW ANALYSIS 6 Hrs

4.1 Customer flow metrics and measurement methods

4.2 Customer flow path analysis

4.3 Customer flow forecasting with AI & IoT

5. PRODUCT ANALYSIS 8 Hrs

5.1 Product sales rate analysis

5.2 Product review analysis

5.3 Product portfolio & structure analysis

5.4 Single product analysis

5.5 Cross-selling analysis

6. SALES DATA ANALYSIS 6 Hrs

6.1 Setting and breaking down sales targets

6.2 Sales composition analysis

6.3 Abnormal order analysis

6.4 Predictive sales tracking & forecasting

7. CUSTOMER ANALYSIS 8 Hrs

7.1 Customer profiling analysis

7.2 Customer purchase behavior analysis

7.3 Customer value analysis

7.4 Customer lifecycle & retention management

8. SERVICE ANALYSIS 6 Hrs

8.1 Service evaluation analysis

8.2 Service quality analysis

8.3 Evaluation trend analysis

8.4 Apply sentiment analysis and social listening for service evaluations

9. FINANCIAL ANALYSIS 8 Hrs

9.1 Overview of strategic profit model

9.2 Profit method analysis

9.3 Asset turnover analysis

9.4 Return on net assets analysis

9.5 Cash flow analysis

9.5 Cash flow & liquidity analysis

10. MARKETING CAMPAIGN PERFORMANCE ANALYSIS 4 Hrs

10.1 Marketing campaign metrics analysis

10.2 Marketing channel analysis

10.3 Marketing event data analysis

10.4 Learn ROI measurement and attribution modeling for campaigns

Recommended textbook

A. Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking – 2nd Edition (2013) by Foster Provost & Tom Fawcett

B. Business Analytics: Data Analysis & Decision Making – 7th Edition (2020) by S. Christian Albright & Wayne L. Winston

C. Marketing Analytics: A Practical Guide to Real Marketing Science – 2nd Edition (2019) by Mike Grigsby

E. Data-Driven Marketing: The 15 Metrics Everyone in Marketing Should Know – 2nd Edition (2018) by Mark Jeffery

F. Customer Analytics for Dummies – 1st Edition (2021) by Jeff Sauro

MDT-343 BUSINESS DATA ANALYSIS AND APPLICATION

INSTRUCTIONAL OBJECTIVE

1. UNDERSTAND THE BASIC CONCEPTS AND METHODS OF BUSINESS DATA ANALYSIS

1.1 Understand the basic concepts of data analysis

1.2 Master the basic process of data analysis

1.3 Learn how to define the analysis approach

1.4 Master the basic methods of data preparation

1.5 Understand the technologies and methods of data processing

1.6 Familiarize yourself with modern data analytics techniques

1.7 Master the modern software to present complex data in clear, interactive, and visual formats.

1.8 Understand the methods of interactive dashboards and real - time reporting systems to improve data analysis efficiency.

1.9 Recognize the operation management methods of the data analysis department

2. MASTER THE CONTENT OF MARKET ANALYSIS

2.1 Understand the basic methods and applications of industry analysis

2.2 Master the basic skills of competitive analysis

2.3 Learn digital market intelligence tools and trend analysis to track online trends and competitor insights for strategic decisions.

3. MASTER THE METHODS OF SHOP TRAFFIC ANALYSIS

3.1 Understand the key metrics for traffic analysis

3.2 Master the methods for analyzing traffic sources

3.3 Apply customer journey analytics for assessing visit quality means using data to evaluate how effectively customers interact with each stage of their buying experience.

3.4 Master the methods for analyzing traffic conversion

4. OFFLINE STORE CUSTOMER FLOW ANALYSIS

4.1 Familiarize yourself with common metrics and measurement methods for customer flow

4.2 Master the methods for analyzing customer flow paths

4.3 Master the prediction models and methods for customer flow

4.3 Use AI-driven forecasting models for predicting customer flow means applying artificial intelligence to anticipate customer traffic and behavior patterns.

5. MASTER THE METHODS OF PRODUCT ANALYSIS

5.1 Understand the calculation and analysis of product sales rate

5.2 Master the methods of product review analysis

5.3 Understand the basic analysis techniques for product structure methods to evaluate and optimize product performance and business offerings

5.4 Learn the basic methods of single product analysis

5.5 Master the methods of cross-selling analysis

6. FAMILIARIZE WITH SALES DATA ANALYSIS METHODS

6.1 Master the skills of setting and breaking down sales targets

6.2 Master the methods of sales composition analysis

6.3 Master the methods for analyzing abnormal orders

6.4 Apply predictive analytics and AI models for sales forecasting means using data-driven algorithms to estimate future sales trends and outcomes.

7. MASTER THE METHODS OF CUSTOMER ANALYSIS

7.1 Master the techniques for customer profiling analysis

7.2 Understand the methods for analyzing customer purchase behavior

7.3 Familiarize yourself with the methods for evaluating customer value

7.4 Learn Customer Lifetime Value (CLV) and retention strategies using data analytics to measure long-term profitability and enhance customer loyalty.

8. FAMILIARIZE WITH SERVICE EVALUATION METHODS

8.1 Understand the methods for analyzing service evaluation

8.2 Master the skills for analyzing service quality

8.3 Understand the methods for analyzing evaluation trends

8.4 Apply sentiment analysis and social listening for service evaluations to assess customer opinions and improve service quality.

9. MASTER THE METHODS OF FINANCIAL ANALYSIS

9.1 Understand the basic concepts of the strategic profit model

9.2 Master the skills for analyzing profit methods

9.3 Learn the methods for analyzing asset turnover

9.4 Understand the skills for analyzing return on net assets

9.5 Apply modern financial analytics tools for cash flow and risk assessment to optimize liquidity management and minimize financial risks.

10. MASTER THE METHODS OF MARKETING CAMPAIGN PERFORMANCE ANALYSIS

10.1 Master the methods for analyzing marketing campaign metrics

10.2 Understand the methods for evaluating marketing campaign channels

10.3 Familiarize yourself with the data analysis techniques for marketing events

10.4 Learn ROI measurement and attribution modeling for campaigns to evaluate marketing effectiveness and optimize budget allocation.

MDT-343 BUSINESS DATA ANALYSIS AND APPLICATION

LIST OF PRACTICALS 96 Hrs

1. **Collect** national public economic statistical data for the past five years to **develop a comprehensive dataset for macroeconomic analysis**.
2. **Clean and format** raw economic data to **produce an analysis-ready dataset with consistent structure**.
3. **Calculate and interpret** key indicators to **identify measurable economic development trends**.
4. **Visualize** analyzed data in Excel using charts and dashboards to **present clear economic insights**.
5. **Conduct** industry analysis to **determine market size, competition level, and growth trends**.
6. **Develop** interactive dashboards in Power BI, Tableau, or Python to **generate real-time analytical visualizations**.
7. **Perform** competitive analysis to **assess market share and strategic positioning of key players**.
8. **Define and compute** web traffic metrics to **quantify visits and major traffic sources**.
9. **Analyze** traffic source statistics to **differentiate between organic, paid, and referral traffic channels**.
10. **Measure** digital analytics metrics such as bounce rate and session duration to **evaluate website engagement quality**.
11. **Calculate** customer flow metrics to **monitor traffic density and movement patterns**.
12. **Analyze** customer flow paths to **optimize physical or digital store layouts for efficiency**.
13. **Apply** forecasting models to **predict future customer traffic and recommend improvements**.
14. **Evaluate** product sales rates to **determine high- and low-performing products**.
15. **Analyze** customer feedback and reviews to **identify product strengths and improvement areas**.
16. **Implement** AI-based forecasting models to **enhance the accuracy of customer traffic predictions**.
17. **Perform** single product performance analysis to **measure contribution to total sales**.
18. **Conduct** basket analysis to **reveal cross-selling opportunities among products**.
19. **Set and distribute** sales targets to **align team objectives with business goals**.
20. **Analyze** sales data composition to **understand sales distribution across products and channels**.
21. **Identify and resolve** abnormal order data to **ensure accuracy of sales reports**.
22. **Apply** sales forecasting methods to **predict future sales trends with quantifiable accuracy**.

23. **Develop** customer profiles to **classify consumers based on demographics and behaviors**.
24. **Analyze** customer purchase behavior to **determine buying frequency and spending patterns**.
25. **Evaluate** customer value to **segment clients based on contribution to revenue**.
26. **Design and implement** customer lifecycle management strategies to **increase retention and loyalty rates**.
27. **Conduct** service evaluation analysis to **measure customer satisfaction levels using survey data**.
28. **Analyze** service quality data to **pinpoint performance issues and recommend corrective actions**.
29. **Utilize** AI-driven lifecycle management tools to **automate personalization and engagement efforts**.
30. **Evaluate** service satisfaction trends to **derive actionable insights for continuous improvement**.
31. **Apply** sentiment analysis and social listening to **capture and interpret real-time customer perceptions**.
32. **Calculate** return on net assets to **assess profitability and investment efficiency**.
33. **Perform** cash flow analysis to **ensure financial stability and operational liquidity**.
34. **Measure** marketing campaign KPIs such as ROI and conversion rate to **quantify effectiveness**.
35. **Compare** performance across marketing channels to **identify the most cost-efficient promotional platforms**.
36. **Summarize and evaluate** marketing campaign outcomes to **highlight successes and propose data-backed improvements**.

MDT-353 COMPREHENSIVE MARKETING TRAINING

Total Contact Hours	**T**	**P**	**C**
Practical 288 Hrs	**0**	**9**	**3**

AIMS: This practical course uses internationally advanced business simulation training, dividing students into small groups. Each group works on marketing activities for a manufacturing and sales company within a specific industry, operating under the same dynamic market conditions over multiple years and scenarios. Students analyze market demand and formulate marketing strategies based on business operational status and market forecast data. The course also involves managing customer satisfaction through various methods, carrying out brand building, market promotion, product design and development, and both online and offline sales activities (direct sales, wholesale, and retail). Additionally, students will adjust marketing strategies through detailed business operations and cost control to maximize corporate profits and enhance professional skills. The system follows industry development trends and talent demands, incorporating new directions in marketing concepts, industry developments, new technologies, new skills, and core competencies into the course content, supported by relevant teaching resources. This approach organically integrates course teaching with professional skills development.

LIST OF PRACTICALS **288 Hrs**

Individual Exercises

1. Collect past five years of company or national sales data to forecast market demand and display the trend in a line chart.
2. Analyze real or simulated market reports to identify high-potential customer segments using Excel filters or charts.
3. Design a market expansion plan by mapping new target regions in PowerPoint or Canva.
4. Simulate an ISO certification audit checklist and evaluate company compliance readiness.
5. Create a customer development plan by listing new outreach methods and expected conversion rates.
6. Draft a bidding proposal document using Word or Excel to participate in a sample tender competition.
7. Develop and launch a mock investment advertisement using Canva or Meta Ads Manager and record audience engagement metrics.
8. Compare multiple wholesale order options in Excel and select the most profitable order using cost-benefit analysis.
9. Conduct product R&D by collecting user feedback and designing a prototype concept in Figma or Canva.
10. Update a digital product inventory sheet by removing discontinued items and adding new stock entries.

11. Prepare a simulated lease or purchase agreement for a factory and calculate total cost of ownership.
12. Evaluate sample production line options by analyzing purchase cost and ROI using Excel formulas.
13. Create a raw material procurement table and compare supplier pricing, quality, and lead times.
14. Design a production plan in Excel to schedule daily or weekly production output.
15. Simulate the delivery process by tracking shipments in a mock logistics dashboard and recording on-time rates.
16. Draft a retailer contract template in Word with clear terms on delivery, payment, and returns.
17. Visualize the goods distribution network in PowerPoint using flowcharts to optimize routes and costs.
18. Apply cost-plus and competitive pricing formulas in Excel to set product prices and compare profit margins.
19. Create a promotion plan outlining discount periods, media channels, and expected reach, then analyze cost impact.
20. Run a simulated media ad bidding campaign using Google Ads or Facebook Ad mock dashboards and record bid outcomes.
21. Enter sample accounts receivable and payable data in Excel and generate a monthly financial summary.
22. Prepare a short-term loan repayment schedule in Excel and calculate total interest paid.
23. Record all management fee transactions and analyze expense ratios for a given quarter.
24. Use Excel tax formulas to compute business tax liability based on given income data.
25. Evaluate long-term loan impact by plotting cash flow trends before and after loan repayment.
26. Record all lease and repair expenses and prepare a bar chart showing monthly maintenance costs.
27. Calculate total inventory holding cost and visualize warehouse expenses in a pie chart.
28. Compute fixed asset depreciation using both straight-line and declining balance methods and compare results.
29. Update a product catalog and track sales performance per product model using Excel pivot tables.
30. Simulate the sale of a production line and calculate profit or loss after depreciation.
31. Plan a production line transformation by estimating upgrade costs and expected productivity gains.
32. Develop a relocation plan outlining logistics, downtime, and total relocation expenses.
33. Prepare a lease-to-buy cost comparison table to decide the best option for factory premises.
34. Simulate the process of selling a factory by calculating its market value and net gain.

35. Create a factory lease termination report detailing penalties and financial outcomes.
36. Conduct an emergency procurement exercise by selecting suppliers for urgent materials and evaluating cost impact.
37. Perform inventory allocation across multiple stores and analyze stock balance and efficiency.
38. Design a discounting strategy and measure its effect on total sales and profit margins using Excel.
39. Simulate an additional shareholder investment and update the company's equity record accordingly.
40. Perform a business operations analysis by calculating and interpreting financial ratios such as ROI, ROA, and profit margin

MDT-362 DIGITAL MARKETING COMPREHENSIVE PRACTICE

Total Contact Hours	**T**	**P**	**C**
Practical 192 Hrs	**0**	**6**	**2**

AIMS: This practical course deeply integrates multiple algorithms and models, including content-based recommendation algorithms, collaborative filtering algorithms, and deep learning models, to accurately replicate a real digital marketing environment. Additionally, based on massive product data and target audience resources, students will gain in-depth insights into market dynamics, comprehensively analyze market competition, and explore target audience needs and behavioral characteristics. During the training, students will simulate the full digital marketing process of a company over multiple cycles, learning how to use crowd labeling to precisely target the audience, then develop marketing strategies. Students will execute marketing activities based on these strategies, analyze and optimize marketing effectiveness, and achieve accurate marketing recommendations based on content portrayal, user profiling, and interest matching. Through this practice, students will acquire skills in industry data analysis, target audience positioning, content creation, and marketing planning, providing a solid foundation for entering marketing-related roles in businesses.

LIST OF PRACTICALS 192 Hrs

1. Collect and analyze real industry user data using Google Analytics to create detailed user profiles.
2. Search and record audience search terms using Google Keyword Planner to identify high-traffic and relevant keywords.
3. Compare and describe the main characteristics of different marketing channels (e.g., social media, email, SEO) to determine the most effective platform for a product.
4. Examine and list the key content elements of a selected landing page to evaluate its clarity and conversion potential.
5. Edit and optimize webpage content by adjusting keywords, headings, and metadata to improve search engine visibility.
6. Prepare and set up an online advertisement using an ad manager platform to practice campaign configuration.
7. Design and run a mock search bidding marketing campaign to understand keyword bidding and cost-per-click performance.
8. Build and test a simple recommendation engine (using tools like ChatGPT or Google AI) to analyze personalized marketing results.
9. Implement and monitor SEO techniques to improve a webpage’s search ranking position.
10. Evaluate and present homepage search rankings using analytics tools to identify visibility improvements.

11. Conduct and summarize market competition analysis using SEMrush or Ahrefs to compare brand performance against competitors.
12. Collect and interpret data from a search bidding campaign to evaluate click-through rate and conversion efficiency.
13. Adjust and refine search bidding strategies based on data results to increase campaign performance.
14. Track and evaluate recommendation engine marketing results to measure user engagement rates.
15. Improve and document recommendation engine marketing by modifying parameters to enhance personalization accuracy.
16. Execute and measure on-page SEO optimization to increase page visibility in SERPs.
17. Compare and report before-and-after optimization results to demonstrate improvement impact.
18. Restructure and optimize bidding keywords into logical groups to enhance ad performance efficiency.
19. Segment and target precise audiences using demographic and interest filters to improve ad reach accuracy.
20. Refine and test search ranking keywords using analytics feedback to achieve higher ranking positions.
21. Collect and analyze full marketing effect data to summarize campaign performance outcomes.
22. Compare and report competitor bidding marketing data to identify successful keyword strategies.
23. Analyze and visualize competitor recommendation marketing performance to understand content effectiveness.
24. Evaluate and compare competitors' SEO results to determine ranking improvement opportunities.
25. Compile and present a full-cycle advertising performance report to show campaign efficiency across all stages.
26. Compare and interpret three-phase (pre-launch, active, post-launch) marketing data to evaluate trend changes.
27. Analyze and chart keyword effectiveness data to identify high-performing keywords.
28. Compare and critique different ad creatives to select the most engaging design.
29. Assess and report audience targeting performance data to identify strong and weak audience segments.
30. Compare and evaluate promotional methods (discounts, influencer marketing, PPC) to select the most cost-effective strategy.
31. Create and visualize user profiles using customer data to understand audience behavior patterns.

32. Map and explain the digital marketing funnel to illustrate customer journey stages.
33. Analyze and calculate overall input-output ratio for marketing investment to measure profitability.
34. Evaluate and compare performance across multiple channels to identify high-return platforms.
35. Assess and report the achievement level of marketing goals using KPIs to track campaign success.
36. Perform and present Phase 1 comprehensive training (planning and setup) to demonstrate foundational campaign design.
37. Conduct and report Phase 2 training (execution and monitoring) to show campaign management skills.
38. Complete and present Phase 3 training (optimization and reporting) to demonstrate strategic analysis ability.
39. Design and simulate a full-cycle aggressive digital marketing strategy to test market expansion performance.
40. Develop and execute a conservative marketing plan to optimize cost-effectiveness under limited budgets.
41. Integrate and compare hybrid marketing strategies combining paid and organic methods to analyze overall impact.
42. Collaborate and compete in group-based digital marketing simulations to enhance teamwork and decision-making skills.

MDT-372 COMPREHENSIVE ENTERPRISE MANAGEMENT TRAINING

Total Contact Hours	**T**	**P**	**C**
Practical 192 Hrs	**0**	**6**	**2**

AIMS: This practical course is set in the context of a manufacturing enterprise, where students are divided into several teams to manage a virtual company that is financially strong and performing well in sales. The teams will engage in operations over several years, simulating actual business conditions. The content covers various aspects of enterprise management, including overall strategy, product research and development, production, marketing, sales, financial management, team collaboration, and performance evaluation. During the course, students will learn how to conduct market research and analysis, analyze sales models, understand consumer behavior, determine product and functional positioning, analyze competitors, and select target markets to form business strategies. Based on the strategic goals, students will develop marketing strategies and work on the combination of these strategies. Throughout this process, students will encounter various typical issues that arise in business operations. They will need to apply skills in market research, analysis, consumer behavior analysis, competitor analysis, and market selection to develop business strategies. The training will help students continuously identify opportunities, analyze problems, make decisions, and ensure the smooth operation of the company while maximizing profit.

LIST OF PRACTICALS 192 Hrs

1. Collect and analyze market data using spreadsheets or online tools to forecast sales for the next quarter.
2. Design and launch a digital advertising campaign using social media or Google Ads to promote a selected product.
3. Create a mock bid proposal for a sample product and simulate the process of winning an order.
4. Prepare delivery schedules and tracking sheets to ensure all customer orders are dispatched on time.
5. Research and identify new market regions or customer segments to propose a market expansion plan.
6. Prepare ISO certification documents by listing all quality control and safety procedures for a factory.
7. Record product entry and exit logs in Excel to update warehouse inventory status.
8. Develop a new product concept and create a short prototype presentation for review.
9. Inspect and compare lease and purchase agreements to decide the most cost-effective factory option.
10. Identify and list machinery suppliers and prepare a quotation comparison for production line purchase.

11. Install simulation software and update a production line layout diagram to improve factory efficiency.
12. Modify production line flowcharts to accommodate a new product design or upgrade.
13. Record raw material stock entries in an inventory management sheet to track available resources.
14. Fill out a purchase order template using supplier data to practice accurate procurement documentation.
15. Create a step-by-step production checklist to initiate and monitor the first production batch.
16. Use online tax calculator tools to estimate and record the payable tax for a business period.
17. Prepare invoices and receipts to record and collect accounts receivable accurately.
18. Calculate cash discounts for early payments and update financial ledgers accordingly.
19. List outstanding supplier invoices and process payments through a sample accounting system.
20. Simulate a short-term business loan using Excel loan formulas to analyze repayment schedules.
21. Prepare a management expense report to analyze the ratio of administrative costs to revenue.
22. Simulate a long-term loan agreement and calculate total interest repayment using Excel formulas.
23. Record monthly factory rental transactions in a financial log to maintain rental history records.
24. Create a maintenance log sheet to track all repair and service expenses for machines.
25. Estimate total monthly inventory fees and visualize data using a bar chart in Excel.
26. Use Excel depreciation functions (SLN/DB) to calculate annual asset depreciation.
27. Prepare a production line sale report showing profit or loss after selling old equipment.
28. Plan a production line conversion activity by creating a Gantt chart of tasks and timelines.
29. Draft a relocation plan for a production unit including cost, time, and resource estimation.
30. Evaluate lease-to-buy options using comparative analysis and recommend the better investment.
31. Simulate the sale of a factory by preparing a valuation and buyer negotiation report.
32. Prepare factory lease termination documents and record financial adjustments post-termination.
33. Perform emergency procurement planning to quickly source materials under urgent conditions.
34. Simulate an additional shareholder investment round and update ownership percentages in Excel.
35. Create and process internal transfer orders to move inventory between departments.

36. Prepare a mock product sales receipt and record it in an accounting ledger.
37. Simulate a factory mortgage case study to understand financing through asset collateral.
38. Research competitor marketing strategies and present a comparative SWOT analysis.
39. Divide a sample market into segments and define the target audience for each segment.
40. Perform a cost-benefit analysis for a new marketing campaign to determine profitability.
41. Analyze company cost structures using charts to identify high-expense areas.
42. Calculate Return on Equity (ROE) using sample financial data to evaluate profitability.
43. Compute sales profit margin for given products and compare with industry benchmarks.
44. Measure marketing expense ratios to assess campaign efficiency.
45. Compute asset turnover ratios using company data to analyze resource utilization.
46. Calculate inventory turnover ratios to evaluate stock movement and sales performance.
47. Estimate payback periods for two investment projects and select the quicker recovery option.
48. Prepare a business performance evaluation report summarizing key financial and operational metrics.
49. Simulate Year 1 business operations and create performance charts for profit and loss.
50. Simulate Year 2 operations using advanced market conditions and compare with Year 1 results.
51. Simulate Year 3 operations to analyze cumulative growth and ROI.
52. Simulate Year 4 operations introducing competition and measure adaptability.
53. Simulate Year 5 operations including inflation and pricing challenges.
54. Simulate Year 6 operations integrating AI-based decision-making tools for optimization.
55. Run a conservative strategy simulation to minimize risk and maintain steady growth.
56. Run an aggressive strategy simulation to maximize profit through high-risk investment.
57. Run a hybrid strategy simulation combining stability and innovation for balanced growth.
58. Organize multi-group business simulation competitions and evaluate team results on KPIs.

DAE
IN
MARKETING（SPECIALIZATION IN DIGITAL MARKETING)

Employability of DAE Pass-Outs with Market Designations and Vertical Progression

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🎯 Employment Opportunities

DAE (Digital Marketing) graduates are in high demand across industries due to the rapid digital transformation of businesses. They can find employment in:

- Digital Marketing Agencies & Creative Firms
- E-Commerce Companies & Online Retailers
- IT and Software Companies (Marketing & Branding Departments)
- Media Houses and Advertising Agencies
- Government and Private Sector Communication Units
- Freelancing Platforms & Self-Employment in Digital Services

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💼 Employers' Expectations from DAE Digital Marketing Graduates

Employers seek candidates who can plan, execute, and manage digital marketing campaigns using both creative and analytical skills.

💻 Technical & Analytical Skills

- Teaching
- Search Engine Optimization (SEO)
- Search Engine Marketing (Google Ads, Bing Ads)
- Social Media Marketing (Facebook, Instagram, LinkedIn, TikTok, YouTube)
- Email Marketing Tools (Mailchimp, HubSpot, SendinBlue)
- Web Analytics & Reporting (Google Analytics, Data Studio, Excel)
- Content Management Systems (WordPress, Shopify)
- Basic Graphic Design (Canva, Adobe Photoshop)
- Video Editing for Social Media Campaigns

📈 Business & Communication Skills

- Marketing Strategy & Campaign Planning
- Branding and Online Reputation Management
- Customer Engagement & Community Management
- Copywriting and Content Creation
- Influencer and Affiliate Marketing
- Understanding of Consumer Behavior in Digital Environments
- Digital Advertising Budgeting & ROI Analysis

🛠️ Practical Digital Marketing Skills

- Managing Social Media Pages and Ad Accounts
- Keyword Research and SEO Content Optimization
- Designing Paid Campaigns (PPC, Display Ads, Social Ads)
- Performance Tracking and Analytics Reporting
- Content Scheduling and Management Tools (Buffer, Hootsuite)
- Building Landing Pages and Funnels for Lead Generation

💼 Initial Job Roles for DAE Digital Marketing Graduates

Graduates can begin their careers in the following entry-level positions:

- Digital Marketing Assistant
- Social Media Executive
- SEO / SEM Assistant
- Content Creator / Copywriter
- PPC Campaign Coordinator
- Email Marketing Assistant
- Influencer Marketing Coordinator
- Freelance Digital Marketer / Virtual Assistant

🚀 Vertical Career Progression in the Public/Private Sector

Digital Marketing professionals can progress through the following career stages:

1. **Digital Marketing Assistant / Coordinator**
2. **SEO / Social Media Executive**
3. **Digital Marketing Specialist / Analyst**
4. **Campaign Manager / Content Strategist**
5. **Digital Marketing Manager / Project Lead**
6. **Head of Digital Marketing / Digital Director / Entrepreneur**

🏢 Career Opportunities Overview

TVET Sector

- Positions: Chief Instructor , Senior Instructor , *Instructor*, ,*Junior Instructor*, .
- Career growth potential up to *Chief Instructor* or *Department Head*.

Industry Roles

- Digital Marketing Executive
- SEO / SEM Specialist
- Social Media Manager
- Content Strategist / Brand Executive
- Performance Marketing Analyst
- Customer Engagement Manager

Entrepreneurship

DAE (Digital Marketing) graduates can launch their own:

- Digital marketing agencies
- Freelance careers (SEO, Ads, Content Creation)
- Online brands or service-based businesses
- YouTube or social media influencer channels

🎓 Minimum Qualification for Teacher/Instructor/ Jr. Instructor

Post	Qualification	Relevant Experience
Jr. Instructor	DAE (Digital Marketing / E-Commerce / CIT / ICT / Software Technology)	3 Years
Instructor	BS in (Digital Marketing / IT / CS / AI / Cyber Security / Information Security / SE / Computer Systems Engineering) or BBA (Marketing / IT)	1 Years
	MS in (Digital Marketing / IT / CS / SE / IoT / Business Analytics) or MBA (Marketing / IT)	Nil

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🌐 Summary

The **DAE (Digital Marketing)** program empowers learners with practical and creative digital marketing skills, enabling them to:

- Enter diverse roles across marketing, e-commerce, and media industries
- Progress into strategic and leadership positions
- Teach within the TVET and higher education sector
- Start their own digital ventures or freelance agencies

This diploma serves as a foundation for further studies in **Marketing, IT, Media, or Business Management**, and provides immediate employability in the growing **digital economy**.

Equipment List for Digital Marketing Major

To meet the practical teaching and training requirements of the **Digital Marketing program**, it is necessary to establish at least two specialized training laboratories: one for **Digital Marketing Operations** and another for **Content Creation & Live Campaign Studio**.

These labs will enable students to gain hands-on experience in key areas such as online advertising, social media management, SEO/SEM, email marketing, content creation, and real-time campaign execution. The detailed equipment specifications for each training laboratory are outlined in the following table.

No.	Item	Specification / Description	Quantity
1	**High-Performance Server**	Latest MIS-compliant server for managing simulations, analytics, campaign databases, and content storage.	1
2	**Workstation Computers**	Latest MIS-compliant systems with **2 GB Graphic Card** for campaign design, SEO/SEM tasks, analytics, and creative work.	26
3	**Operating System & Browsers**	Windows 10 OS with Chrome and Firefox for web-based marketing tools, dashboards, and browsing.	Installed on all systems
4	**Digital Marketing Simulation Software**	Simulates real-world operations: campaign creation, SEO/SEM optimization, social media marketing, email automation, customer analytics.**Architecture:** 3-tier B/S (Browser/Server) model. **Deployment:** VPS-based (international marketing simulation providers recommended).	1
5	**Content Creation & Live Streaming Software**	Supports live broadcasting, real-time engagement (comments brand showcasing, post-campaign analytics. Compatible with **H.264, MPEG-4, AVS** codecs.	1
6	**Gigabit Network Switch**	24-Port Gigabit switch for high-speed LAN connectivity.	1
7	**Wireless Access Point**	2.4 GHz & 5 GHz, supports ≥ 26 clients	1

No.	Item	Specification / Description	Quantity
	(Dual-Band)	simultaneously for wireless connectivity.	
8	**Structured Networking System**	Cabling and configuration connecting all 26 workstations and devices.	1 set
9	**Fiber Internet Connection**	50 Mbps or higher connection for real-time analytics, campaign uploads, and streaming.	1
10	**UPS (Uninterruptible Power Supply)**	3 KVA Solar-supported UPS (120 Amp tubular batteries × 2) ensuring continuous power.	1
11	**Multimedia Projector with Wireless Display**	Latest MIS-compliant projector for campaign presentations, demonstrations, and lectures.	1
12	**LED Fill Light**	18-inch (15 W) adjustable light for professional-grade video and photo content.	1 per LAB
13	**Multi-Device Tripod Stand**	Adjustable stand for smartphones and fill lights to ensure stable recording.	1 per LAB
14	**Smartphone / Tablet (for Content Creation)**	RAM ≥ 4 GB, ROM ≥ 64 GB, Screen Resolution ≥ 1280 × 720 for HD recording and streaming.	1 per LAB
15	**Wireless Microphone (with Monitoring)**	Features: environmental noise reduction, real-time headphone feedback (ear return), external power compatibility.	1 per LAB
16	**Virtual Background Screen**	Green/neutral background screen, size ≥ 1.5 m (W) × 2 m (H), for video content and campaign shoots.	1 per LAB
17	**Creative Design & Editing Tools (Software Suite)**	Licensed tools such as **Adobe Creative Cloud / Canva Pro / Filmora / DaVinci Resolve** for graphic, video, and content editing.	As required
18	**Analytics & Marketing Tools (Cloud-Based)**	Access to platforms such as **Google Analytics, Google Ads, Facebook Ads Manager**, and other automation tools.	Institutional license
19	**Headphones / Audio Monitoring Devices**	Over-ear monitoring headphones for accurate sound during video editing and live sessions.	26
20	**DSLR / Mirrorless Camera (Optional)**	For professional campaign photography and promotional content creation.	1
21	**Studio Backdrop Kit (Optional)**	Interchangeable background cloths and frame system for photo/video sessions.	1

List of Consumable

1. USB drives
2. External hard drives
3. SD cards / memory cards
4. Printer cartridges
5. Label sheets / sticker papers
6. Notepads
7. Sticky notes
8. Pens / pencils
9. Whiteboard markers
10. Flip charts
11. Highlighters
12. Erasers
13. Binder clips / paper clips
14. Staplers & staples
15. Folders / file organizers
16. Presentation boards
17. Extension cords / adapters
18. Headphones / microphones

Media & Content Assets

19. Stock images
20. Stock videos
21. Audio clips / music tracks
22. Fonts
23. Icons
24. Templates for social media posts
25. Templates for email campaigns
26. Templates for digital ads
27. QR codes
28. Sample ad copies

Equipment List for DAE Digital Marketing

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