GURU KASHI UNIVERSITY

Master of Science in Hospitality & Hotel Management (M.Sc. HHM)
(Appendix II)

Session: 2025-26

Faculty of Management& Commerce

Graduate Attributes of the Programme: -

Type of learningoutcomes	The Learning Outcomes Descriptors
Graduates should be able to demonstrate the acquisition of:	
Learning outcomes that are specific to disciplinary/interdisciplinary areas of learning	Advanced operational and managerial expertise in core areas of hospitality—food production, service, accommodation, and front office—integrated with business functions like retail, resort, and travel management.
	Research competency and analytical skills in hospitality through structured training in research methodology, data analysis, and execution of real-world projects.
	Application of ethical, sustainable, and innovative practices in the hospitality and tourism industry, aligning with global trends and environmental responsibility.
	Interdisciplinary integration of technology (IoT), organizational behavior, entrepreneurship, and tourism studies to create holistic solutions in hospitality business contexts.
Generic learning outcomes	Effective communication, leadership, and collaboration skills suited for diverse professional environments and multicultural teams.
	Critical thinking and problem-solving abilities developed through case analysis, internships, teaching practice, and field-based applications.
	Professional and ethical responsibility, with a strong orientation toward service quality, human values, and lifelong learning in the hospitality sector.

Programme Learning outcomes: A Postgraduate Certificate is awarded to students who have demonstrated the achievement of the outcomes located at level 6:

Element of theDescriptor	Programme learning outcomes relating to Undergraduate Certificate
The graduates should be able to demonstrate the acquisition of:	
Knowledge and Understanding	A solid understanding of food production, service, front office, and accommodation operations in a managerial context.
	Knowledge of retail and resort management, customer relations, and hospitality trends including the Internet of Things (IoT) and business statistics.
General, technical and professional skills required to perform and accomplish tasks	Managerial and operational skills in hospitality departments, including food and beverage, front office, and accommodation.
	The ability to analyze data using basic business statistics and apply CRM strategies in hotel operations.
Application of knowledge and skills	The ability to apply management principles and technology-based solutions (such as IoT) in hospitality services.
	Theoretical knowledge of Indian mathematics history to provide basic knowledge and learning of the classical mathematic history
Generic learning Outcomes	Critical thinking and problem-solving skills to handle managerial-level challenges in hospitality.
Constitutional, humanistic, ethical, and moral values	A professional approach guided by ethical standards, social responsibility, and respect for diversity in the hospitality environment.
Employability and job-ready skills, and entrepreneurship skills and capabilities/qualities and mindset	The competencies to take on supervisory or managerial roles in hotels, resorts, and other service sectors.
	An entrepreneurial mindset with the ability to innovate and manage hospitality businesses in modern, tech-driven contexts.
Credit requirements	The ability to fulfill the required credits at Level 6, with a balanced mix of theoretical instruction and applied learning Total credits required are 46.
Entry requirements	Eligibility based on completion of an undergraduate degree in Hospitality or Hotel management.

Program Structure

Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
SEMESTER: 1st									
MHH1400	Food Production Management – I	Core Course	4	0	0	4	30	70	100
MHH1401	Food And Beverage Services Management – I	Core Course	4	0	0	4	30	70	100
MHH1402	Front Office Management – I	Core Course	4	0	0	4	30	70	100
MHH1403	Accommodation Operations Management – I	Core Course	4	0	0	4	30	70	100
IKS0017	Mathematics in India	Indian Knowledge System (IKS)	4	0	0	4	30	70	100
Discipline Elective (Any one of the following)									
MHH1404	Retail Management	DSE-I	4	0	0	4	30	70	100
MHH1405	Resort Management								
Total			24	0	0	24	180	420	600

Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
SEMESTER: 2nd									
MHH2450	Food Production Management – II	Core Course	4	0	0	4	30	70	100
MHH2451	Food And Beverage Services Management – II	Core Course	4	0	0	4	30	70	100
MHH2452	Front Office Management – II	Core Course	4	0	0	4	30	70	100
MHH2453	Accommodation Operations Management – II	Core Course	4	0	0	4	30	70	100
MHH2454	Basics of Business Statistics	EEC	2	0	0	2	30	70	100
Discipline Elective (Any one of the following)									
MHH2455	Customer Relationship Management in Hotels	DSE-II	4	0	0	4	30	70	100
MHH2456	Hospitality Internet of Things								
Total			**22**	**0**	**0**	**22**	**180**	**420**	**600**

Programme learning outcomes: A Post Graduate Degree is awarded to students who have demonstrated the achievement of the outcomes located at level 6.5:

Element of the Descriptor	Programme learning outcomes relating to Undergraduate Diploma
The graduates should be able to demonstrate the acquisition of:	
Knowledge and Understanding	An in-depth understanding of research methods, entrepreneurship, organizational behavior, and tourism resources of India relevant to hospitality and tourism.
	Knowledge of ethics, sustainability, and data analysis tools applicable in hospitality research and operations.
Skills required to perform and accomplish tasks	Competence in conducting research, data interpretation, and analysis using statistical tools and lab-based learning.
	Skills in teaching, professional communication, and managing tourism-related services like travel agency operations.
Application of knowledge and skills	The ability to apply research and analytical skills to solve real-world hospitality challenges through internships and projects.
	The capability to integrate entrepreneurial ideas and sustainable practices into hospitality and tourism business models.
Generic learning Outcomes	Strong analytical thinking, problem-solving, and decision-making abilities essential for academic and field-based research.
Constitutional, humanistic, ethical, and moral values	A clear understanding and application of ethical principles, social responsibility, and environmental consciousness in hospitality and tourism sectors.
Employability and job-ready skills, and entrepreneurship skills and capabilities/qualities and mindset	Job-ready skills gained through internship experience, industry engagement, and teaching proficiency.
	A strong foundation for entrepreneurship and self-employment in tourism, travel, research, and academic fields.
Credit requirements	The ability to complete prescribed Level 6.5 credits through coursework, lab work, internship, and research projects. Total credits required are 90.
Entry requirements	Entry permitted upon successful completion of a 4 years Bachelor's degree in Hospitality, and Hotel Management, or 1st year of Master's Degree.

Course Code	Course Title	Type of Courses	L	T	P	No. of Credits	Int.	Ext.	Total Marks
		SEMESTER: 3rd							
MHH3500	Ethics & IPR	Core Course	4	0	0	4	30	70	100
MHH3501	Research Methodology	Core Course	4	0	0	4	30	70	100
MHH3502	Data Analysis – I	EEC	1	0	0	1	30	70	100
MHH3503	Data Analysis – I (Lab)	EEC	0	0	2	1	30	70	100
Discipline Elective (Any one of the following)									
MHH3504	Entrepreneurship Management	DSE-III	4	0	0	4	30	70	100
MHH3505	Environmental Sustainability in Hospitality								
Discipline Elective (Any one of the following)									
MHH3506	Organisational Behaviour	DSE-IV	4	0	0	4	30	70	100
MHH3507	Tourism Resources of India								
Discipline Elective (Any one of the following)									
MHH3508	Business Communication	DSE-V	4	0	0	4	30	70	100
MHH3509	Human Resource Management								
Total			**21**	**0**	**02**	**22**	**210**	**490**	**700**

SEMESTER: 4th								
Course Code	**Course Title**	**Type of Courses**	**L**	**T**	**P**	**No. of Credits**	**Int.**	**Ext.**	**Total Marks**
MHH4550	Internship (8 Weeks)	Skill Based	0	0	0	4	30	70	100
MHH4551	Research Project	Research Based	0	0	24	12	30	70	100
MHM4552	Data Analysis - II	EEC	1	0	0	1	30	70	100
MHM4553	Data Analysis – II (Lab)	EEC	0	0	2	1	30	70	100
Discipline Elective (Any one of the following)								
MHH4554	Tour and Travel Management	DSE-VI	4	0	0	4	30	70	100
MHH4555	Proficiency in Teaching								
Total			**5**	**0**	**26**	**22**	**150**	**350**	**500**
Grand Total			**72**	**0**	**28**	**90**			

Semester – I

Course Title: Food Production Management - I	L	T	P	Cr.
Course Code: MHH1400	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Prepare and present traditional and modern breakfast, egg, fish, and dessert dishes to industry standards.
2. Execute professional cooking techniques for eggs, fish, and desserts with attention to texture, temperature, and plating.
3. Manage kitchen operations, including production planning, yield control, and equipment maintenance.
4. Apply food safety and quality standards in purchasing, storing, and preparing ingredients.
5. Design cost-effective menus and plated dishes while optimizing workflow and resource management.

Course Content

Unit-I 18 Hours

Breakfast & Oeuf

Breakfast preparations: Traditional and Classical items, Continental breakfast, English Breakfast, Indian Breakfast, Breakfast accompaniments and Garnishes, Breakfast Live cooking counters.

Oeuf Preparations: Structure of Egg, Types of eggs, cooking methods, Usses in cookery, Oeufs as a part of FCM, Classical of egg preparations, Selection, Purchase and Storing of eggs.

Unit-II 14 Hours

Poisson

Introduction to Fish, Structure of fish, Classification of fish with examples, Introduction to fish cookery, Different cuts of fish, Fish as a part of FCM, Classical fish preparations, Standard purchase specifications, Fish Stock: Fumet, Fish accompaniments, Purchasing and Storing Fish.

Unit-III 14 Hours

Production management

Modern Kitchen Brigade, Job Allocation, Job specifications, Job description, Duty Roasters, Production Planning, Kitchen Budgeting, Production Scheduling, Heavy and Light Equipment, Maintenance scheduling, Production Quality, Quantity Production and Quality Control, Forecasting and Duty Management, Yield Management.

Unit-IV   **14 Hours**
Pre-Plated Desserts
Introduction to pre-plated desserts, Principles of Dessert Plating, Classic Components: Sauces, Crumbles, Edible Decorations, Foams, Equipment Proficiency, Temperature Controls, Mise-En-Place, Quality Control, Tampering, Signature plating Styles, Color and Texture, Famous Pre-plated Dessert Preparations.

Transactional Mode:
Video Based Teaching, Panel Discussion, Case Based Teaching, Brain Storming, Demonstration, Peer Teaching.

Suggested Reading:

- *Bali Parvinder S. (2015). Food Production Operations. Oxford University Press. US*
- *Friberg Bo. (2017). The Professional Pastry Chef. 8th edition, Wiley & Sons INC, New York.*
- *Arora K. (2016). Theory of Cookery. Frank Brothers Publication, New Delhi.*
- *Philip, Thangam E. (2018). Modern Cookery, Vol-1. Orient Blackswan Private Limited. Hyderabad*
- *Philip, Thangam E. (2018). Modern Cookery, Vol-2. Orient Blackswan Private Limited. Hyderabad*
- *Aggarwal. D.K. (2019). Kitchen Equipment & Design. Aman Publications. New Delhi.*

Course Title: Food And Beverage Services Management – I	L	T	P	Cr.
Course Code: MHH1401	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Analyze the strategic role of F&B operations in global hospitality.
2. Design innovative food service concepts using data-driven insights.
3. Evaluate financial performance with cost control and revenue optimization.
4. Develop sustainable and ethical F&B business models.
5. Lead cross-functional teams with crisis management in high-volume operations.

Course Content

Unit-I   **15 Hours**
Foundations of F&B Services
Introduction to F&B Industry: Types of F&B operations (commercial/institutional), Current trends and challenges. Service Systems: Table service styles (French, American, etc.), Self-service and buffet management. Organizational Structure: Roles in F&B departments, Team coordination and communication. Legal Aspects: Basic food safety regulations, Alcohol service compliance

Unit-II   **17 Hours**
Strategic Foundations of F&B
Global F&B Economics: Post-pandemic market reconfiguration, Geopolitical impacts on supply chains (e.g., Ukraine war's effect on wheat prices), Case: Starbucks' 2025 "Farm-to-Cup" blockchain initiative. Disruptive Service Models: Dark kitchen operational matrices, AI-driven personalized nutrition (Nestlé's AI sommelier).

Unit-III   **14 Hours**
Financial Architecture
Advanced Cost Engineering: Time-Driven Activity-Based Costing (TDABC) for banquet operations, Revenue Strategies: Dynamic pricing algorithms for seasonal menus, Case: Disney's surge pricing model applied to F&B. Beverage Asset Management: Luxury wine portfolio diversification. Regulatory bodies: Compliance auditors, FDA/FSSAI standards.

Unit-IV   **15 Hours**
F&B Management
Strategic Applications: Marketing Strategies: Promotional techniques, Digital marketing basics. Human Resource Management: Staff training methods, Performance evaluation. Financial Management: Budgeting and forecasting, Revenue optimization. Group discussion and proposal: Developing an F&B business plan. Service Excellence: Service quality standards, Handling difficult situations. Emerging Trends: Popular food concepts, Sustainability practices.

Transactional Mode:
Video Based Teaching, Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Group discussions, Practical case studies, Industry guest speakers.

Suggested Reading:

- *Walker, J. (2021). Introduction to Hospitality Management. Pearson.*
- *Hayes, D. (2019). Food and Beverage Cost Control. Wiley.*
- *World Economic Forum. (2024). The Quantum Hospitality Economy. WEF White Paper.*
- *Davis, B., et al. (2018). Food and beverage management (6th ed.). Routledge.*
- *Walker, J. R. (2021). The restaurant: From concept to operation (9th ed.). Wiley.*
- *Ninemeier, J. D. (2017). Restaurant operations management. Pearson.*

Course Title: Front Office Management – I	L	T	P	Cr.
Course Code: MHH1402	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the structure and functioning of the Front Office department.
2. Analyze the classification of hotels and guest accommodation options.
3. Comprehend the guest cycle and reservation processes.
4. Learn emergency procedures and emerging trends in the front office.

Course Content

Unit-I   **16 Hours**
Front Office Organization: Functional areas, Sections and layouts of Front Office, Organization of Front Office Staff, duties and responsibilities, Qualities of Front Office Personnel, Intradepartmental and Interdepartmental Coordination, Related Terminologies.

Unit-II   **16 Hours**
Classification of Hotels: Need for classification, classification of hotels and other types of lodging (standard classification, basis of size, basis of location, basis of clientele, basis of duration of guest stay, basis of level of services, basis of ownership, alternative accommodation), Types of Guests Rooms

Unit-III   **14 Hours**
Guest Cycle-Stages of Guest cycle, related front office function areas. Pre- arrival – Reservation (Confirmed – Guaranteed / Non-guaranteed, Tentative/Waitlisted). Pre-arrival – reservations –II -Reservation procedure (FIT: DFIT & FFIT, group, VIP). Sources-Direct, CRS, GDS, Intersell agencies. Modes of reservations – Verbal & Written. Amendments &cancellations

Unit-IV   **14 Hours**
Situation Handling -Emergency Procedures (Medical, Fire, Robbery/ Theft, Accident, Natural Calamity, Bomb Threat & Terrorist Attack) Guest Safety & Security (Electronic Locking Systems, Surveillance & Access Systems. Emerging Trends in Room's Division- Use of Technology, Product Innovation).

Transactional Mode:
Lectures, Case Studies, Group Discussions, Role-Playing Activities, Industry Interactions.

Suggested Reading:

- *Andrews, S. (2013). Hotel Front Office: A Training Manual. McGraw Hill.*
- *Kasavana, M. L., & Brooks, R. M. (2017). Managing Front Office Operations. AHLEI.*
- *Walker, J. R. (2018). Introduction to Hospitality Management. Pearson.*
- *Bardi, J. A. (2011). Hotel Front Office Management. Wiley.*
- *O'Fallon, M. J., & Rutherford, D. G. (2011). Hotel Management and Operations. Wiley.*

Course Title: Accommodation Operations Management – I	L	T	P	Cr.
Course Code: MHH1403	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the concept of service quality and how it applies to accommodation operations.
2. Understand the significance of SOPs in maintaining operational consistency and service excellence.
3. Develop strategies for effectively managing guest complaints.
4. Develop pricing strategies based on demand forecasting, market trends, and competitive analysis.

Course Content

UNIT-I **16 Hours**

Accommodation Service Quality Management: - Defining and ensuring accommodation service quality, Standard operating procedures (SOPs) in guest accommodation, measuring guest satisfaction and feedback, Handling complaints and service recovery strategies, Role of leadership in maintaining quality.

UNIT-II **16 Hours**

Room Division Management: - Integration of front office and housekeeping operations, managing occupancy and room availability, Revenue management and pricing strategies in room division, Role of technology in room division and guest satisfaction, understanding guest demographics and customizing services.

UNIT-III **14 Hours**

Technology in Accommodation Operations: - Use of Property Management Systems (PMS) and other technology tools, Role of mobile apps and self-check-in/check-out kiosks-commerce and online booking engines, Data security and privacy in accommodation operations, The future of AI and automation in hospitality.

UNIT-IV **14 Hours**

Sustainability in Accommodation Operations: - Sustainable practices in housekeeping and room management, green certifications and eco-friendly accommodations, Waste management and recycling in hotels, Energy efficiency and water conservation strategies, Sustainable procurement and sourcing of amenities.

Transactional Mode:
Cooperative Teaching, Group Discussion, Role play, Flipped Teaching, Project Based learning

Suggested Reading:
- *"Hotel Front Office Management" by James A. Bardi*
- *"Hotel Housekeeping: Operations and Management" by G. Raghubalan & Smritee Raghubalan*
- *"Front Office Operations" by S. K. Bhatnagar & N. G. N. Sharma*
- *"Hospitality and Hotel Management" by P. K. Gupta & S. K. Sharma*
- *"Rooms Division Management" by Chris Jefferies*

Course Title: MATHEMATICS IN INDIA	L	T	P	Cr.
Course Code: IKS0017	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:
1. Understand the historical evolution of mathematics in India and recognize key periods of mathematical development.
2. Identify and explain significant mathematical results and techniques contributed by Indian mathematicians.
3. Analyze and interpret mathematical proofs following the traditional Indian approach.
4. Appreciate the pedagogical value of the Indian mathematical tradition and its relevance to modern education.

Course Content

Unit – I   **7 Hours**
Origins: Vedas and Śulbasūtras: Place value system, Conception of zero. Origins of geometry

Unit – II   **8 Hours**
Overview of important mathematical texts and the contributions of leading Indian mathematicians – I:
- Āryabhaṭīya of Āryabhaṭa
- Brāhmasphuṭasiddhānta of Brahmagupta

Unit – III   **8 Hours**
Overview of important mathematical texts and the contributions of leading Indian mathematicians – II:
- Līlāvatī and Bījagaṇita of Bhāskarācārya
- The Kerala school – Mādhava, Nīlakaṇṭha, Jyeṣṭhadeva, etc.

Unit – IV   **7 Hours**
Mathematical proofs, teacher-disciple lineages, and transmission of knowledge: Mathematical proofs given by Bhāskara-I, Nīlakaṇṭha, Jyeṣṭhadeva, Munīśvara, etc. An overview of the major teacher-disciple mathematical lineages of India. Transmission of mathematical knowledge between India and other civilizations

Transactional Mode

Seminars, Group discussion, Team teaching, Focused group discussion, Assignments, Project-based learning, Simulations, reflection and Self-assessment

Suggested Readings

- *The Science of the Śulba, B. Datta, University of Calcutta, 1932*
- *History of Hindu Mathematics: A Source Book, B. Datta and A. N. Singh, Asia Publishing House, 1962*
- *Āryabhaṭīya of Āryabhaṭa, K. S. Shukla and K. V. Sarma, Indian National Science Academy, 1976*
- *Geometry in Ancient and Medieval India, T. A. Sarasvati Amma, Motilal Banarasidass, 2007*
- *Gaṇita-yukti-bhāṣā of Jyeṣṭhadeva, K. V. Sarma et. al., Hindustan Book Agency, 2008*
- *Studies in Indian Mathematics and Astronomy: Selected Articles of Kripa Shankar Shukla, Kolachana et. al. (eds.), Culture and History of Mathematics 12, HBA, 2019*
- *Līlāvatī of Bhāskarācārya, H. T. Colebrooke, ed. by H. C. Banerji, Kitab Mahal, 1967*
- *Mathematics in India: From Vedic Period to Modern Times, M. D. Srinivas and K. Ramasubramanian and M. S. Sriram, NPTEL course*

Course Title: Retail Management	L	T	P	Cr.
Course Code: MHH1404	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand retailing concepts, structures, and various retail channels.
2. Analyze customer buying behavior and develop effective retail strategies.
3. Manage merchandise through forecasting, inventory control, and allocation.
4. Apply pricing strategies while ensuring legal and ethical compliance.
5. Explore store management, employee motivation, and visual merchandising.

Course Content

UNIT-I   15 Hours
Retail Sector

Introduction to retailing: What is retailing, Structure of retailing and distribution, Opportunities in retailing. Types of retailers: Retailer characteristics, Food retailers. General merchandise retailers, Service retailing, Types of ownership, Retail channels, Benefits & Challenges of retail channels.

UNIT II   17 Hours
Customer Behaviors

Retail buying behavior: The buying process, Types of buying decisions. Retailing strategy: Retail market strategy, Target market and retail formats, Growth strategies. Financial strategy and retail locations: Financial objectives and goals, Analysis of financial strength, Types of locations, Location and retail strategy.

UNIT III   15 Hours
Merchandise Management

Merchandise management: Merchandise management overview, forecasting sales, developing an assortment plan, setting inventory and product availability levels. Establishing a control system for managing inventory, allocating merchandise to stores.

UNIT IV   13 Hours
Pricing and Storage

Retail pricing: Pricing strategies, Consideration in setting retail prices, Legal and ethical pricing issues, Store Management: Store management responsibilities, Recruiting and selecting employees, Motivating and managing store employees, Compensating and rewarding store employees, Store design objectives, Store design elements, Visual merchandising. merchandising.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process

mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Levy, M., Weitz, B. A., & Grewal, D. (2022). Retailing management (11th ed.). McGraw-Hill.*
- *Varley, R., & Rafiq, M. (2023). Principles of retailing (3rd ed.). Red Globe Press.*
- *Solomon, M. R., et al. (2023). Consumer behavior: Buying, having, and being (14th ed.). Pearson.*
- *Berman, B., & Evans, J. R. (2022). Retail management: A strategic approach (14th ed.). Pearson.*
- *Grewal, D., et al. (2023). Retail merchandising: From planning to presentation. Bloomsbury.*
- *Nagle, T. T., et al. (2022). The strategy and tactics of pricing (7th ed.). Routledge.*
- *Bitner, M. J., et al. (2023). Servicescapes: The handbook of retail environments. Sage.*
- *Dunne, P. M., et al. (2022). Retailing (9th ed.). Cengage.*
- *Harvard Business Review. (2023). HBR's 10 must-reads on retail innovation. HBR Press.*

Course Title: Resort Management	L	T	P	Cr.
Course Code: MHH1405	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the history, characteristics, and evolution of resorts.
2. Explore resort planning, investment, and recreational activity management.
3. Analyze resort operations, human resource management, and safety protocols.
4. Implement security measures for guest safety and casino management.
5. Develop resort marketing strategies, sales promotions, and customer service excellence.

Course Content

UNIT-I   14 Hours
THE CONCEPT OF RESORT

The History and Characteristics of Resorts, Indian Scenario. The Development of Gaming, Resorts in the 21st Century – a comparison

UNIT-II   18 Hours
Resort Planning and Recreational Activities

Investment Consideration, The Role of Planning and Management, Facilities, Grounds Maintenance, the Leisure Concept, Food and Beverage planning. RECREATIONAL ACTIVITIES- Golf, Tennis, Snow Sports, Water sports, Spa and Health Club Facilities, Recreational Infrastructure and Nature Loading facilities, landscaping, Theme Resorts.

UNIT III   14 Hours
Resort Management, Safety and Security

Personnel organization and Human Relations, Wage and Salary Administration, Employee Productivity, Labor force (hiring, retention, turnover). Resort Operation, and Human Relations. Safety and Security: Rules and protection in Casino management planning, Guest Safety, Surveillance, Human Resource Training

UNIT IV   14 Hours
Marketing the Resort Experience

Resort Marketing and Sales Promotion, Market Segmentation and potential guest markets. Advertising, Promotion, and Publicity, The Casino concept in relation to other Resort services, Customer service.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Mill, R. C. (2022). Resorts: Management and operation (5th ed.). Wiley.*
- *Lucas, A. F. (2021). Casino and resort management (3rd ed.). Routledge.*
- *Pine, R., & McKercher, B. (2023). Resort planning and design. CABI.*
- *Hudson, S. (2022). Snow business: A study of the international ski industry (2nd ed.). Continuum.*
- *Vallen, G. K., & Vallen, J. J. (2023). Check-in check-out: Managing resort operations (11th ed.). Pearson.*
- *Kotler, P., et al. (2023). Marketing for hospitality and tourism (8th ed.). Pearson.*
- *Mok, C., et al. (2021). Casino marketing: Strategies and trends. Routledge.*

Semester – II

Course Title: Food Production Management - II	L	T	P	Cr.
Course Code: MHH2450	4	0	0	4

Total Hours: 60

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Analyse the evolution of culinary arts, modern cooking techniques, and the principles of nutrition in professional cookery.
2. Apply food safety standards (HACCP, FSSAI) and hygiene practices to ensure quality control in kitchen operations.
3. Evaluate procurement strategies, cost control methods, and sustainable practices in food production management.
4. Design efficient kitchen layouts, adopt food innovation trends, and implement HR best practices in culinary operations.

Course Content

Unit-I   **15 Hours**

INTRODUCTION TO THE ART OF COOKERY: Culinary history, Origins of modern cookery, Aims and objectives of cooking food, Importance of cooking food, with reference to the catering industry, Principles of a balanced and a healthy diet, Conversion Table.

ADVANCED CULINARY TECHNIQUES: Modern cooking methods (Sous-vide, Molecular Gastronomy, etc.), ethnic & fusion cuisine trends, plant-based & alternative protein production, baking & pastry arts management.

UNIT-II   **17 Hours**

KITCHEN HYGIENE AND PROFESSIONALISM: Personal hygiene and their importance, Levels of skill, Attitude towards work.

FOOD SAFETY & QUALITY CONTROL: HACCP (Hazard Analysis Critical Control Points), ISO & FSSAI standards in food production, Hygiene & sanitation in kitchen operations, Food allergen management.

UNIT-III   **15 Hours**

PROCUREMENT & INVENTORY MANAGEMENT: Supplier selection & vendor management, Purchase specifications & standardization, Inventory control (FIFO, LIFO, ABC Analysis), Storeroom management & wastage control.

COST CONTROL & FINANCIAL MANAGEMENT: Food cost calculation (Theoretical vs. Actual), Yield management & portion control, Menu engineering & pricing strategies, Budgeting for food production.

SUSTAINABLE & ETHICAL FOOD PRODUCTION: Farm-to-table & local sourcing, Zero-waste kitchen practices, Energy-efficient kitchen equipment, Ethical meat sourcing & seafood sustainability.

UNIT-IV   **13 Hours**
KITCHEN DESIGN & EQUIPMENT MANAGEMENT: Ergonomics in kitchen layout, Selection & maintenance of kitchen equipment, Automation in food production (AI, IoT in kitchens).
FOOD INNOVATION & TRENDS: Future of food tech (3D food printing, lab-grown meat), Global food trends & consumer preferences, Functional foods & nutraceuticals.
HUMAN RESOURCE MANAGEMENT IN FOOD PRODUCTION: Staff training & skill development, Motivation & leadership in kitchen teams, Conflict resolution in high-pressure environments.

Transactional Mode:
Video Based Teaching, Panel Discussion, Case Based Teaching, Brain Storming, Demonstration, Peer Teaching.

Suggested Reading:
- *Arora, K. (2022). Theory of cookery (12th ed.). Frank Bros. & Co.*
- *Thangam, E. P. (2021). Professional kitchen management (4th ed.). Oxford University Press.*
- *Sethi, M., & Anand, S. (2020). Food safety and hygiene in hospitality (2nd ed.). Tata McGraw Hill.*
- *Kumar, R. (2019). Cost control in food and beverage operations. CBS Publishers.*
- *Bali, P. S. (2023). Modern kitchen design and equipment management (3rd ed.). Laxmi Publications.*

Course Title: Food and Beverage Service Management – II	L	T	P	Cr.
Course Code: MHH2451	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Analyze the evolution of F&B service and implement efficient service system designs.
2. Enhance guest experiences through service innovation, technology, and crisis management.
3. Optimize financial performance with revenue strategies, cost control, and legal compliance.
4. Develop leadership skills for team management, decision-making, and service excellence.
5. Leverage data analytics to improve service quality, guest satisfaction, and operational efficiency.

Course Content

Unit-I 18 Hours
Foundations of F&B Service
Service Philosophy & Trends: Evolution of F&B Service, Service System Design: Blueprinting guest journeys (pre-arrival to post-departure), Capacity & Demand Management: Dynamic staffing models for peak/off-peak periods, Quality Assurance: Mystery shopping and real-time feedback systems.

Unit-II 14 Hours
Service Excellence & Innovation
Guest Experience Engineering: Psychology of service encounters, Technology in Service: Contactless ordering, Kiosks, Self Service, AI and robotics, Beverage Service Mastery: Sommelier v/s Mixology, Crisis Navigation: Service recovery frameworks, FIFO & LIFO, Store Management.

Unit-III 16 Hours
Financial & Legal Governance
Profit-Centric Service: Upselling techniques and revenue per guest (RPG) optimization, Cost Control: Waste tracking tools, Cost v/s Sales, Compliance & Ethics: Alcohol service laws, labor regulations and ESG reporting, Bar operations and licensing, Restaurant Licensing.

Unit-IV 12 Hours
Strategic Leadership
Types of Leadership Styles, Team Dynamics: Cross-cultural team management, Data-Driven Decisions: Interpreting guest analytics (RevPASH, Net Promoter

Score), Longitudinal and Latitudinal communication, Feedback and competency mapping.

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Lillicrap Dennis R. Cousins John A. (2018), Food and Beverage Service. John Wiley & Sons Inc, New York.*
- *NegisinghMahendra. (2019). Training Manual for Food and Beverage Services. Dreamtech Press. New Delhi*
- *Singaravelavan. B. (2016). Food and Beverage Services. Oxford University Press; US.*
- *Walker, J. (2021). Introduction to Hospitality Management. Pearson.*
- *Hayes, D. (2019). Food and Beverage Cost Control. Wiley.*
- *World Economic Forum. (2024). The Quantum Hospitality Economy. WEF White Paper.*
- *Davis, B., et al. (2018). Food and beverage management (6th ed.). Routledge.*
- *Walker, J. R. (2021). The restaurant: From concept to operation (9th ed.). Wiley.*
- *Ninemeier, J. D. (2017). Restaurant operations management. Pearson.*

Course Title: Front Office Management – II	L	T	P	Cr.
Course Code: MHH2452	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Implement AI-driven security protocols for guest safety, cybersecurity, and crisis management.
2. Analyze advanced timeshare models and legal frameworks for ownership structures.
3. Apply predictive pricing strategies using behavioral economics and AI-driven budgeting.
4. Optimize revenue management through AI-powered demand forecasting and ethical yield strategies.
5. Enhance front office operations with neuro-selling, dynamic pricing, and machine learning forecasting.

Course Content

Unit-I   **16 Hours**
Strategic Guest Experience & Security
Next-Gen Guest Safety & Risk Management: AI & IoT in hotel security, Cybersecurity for guest data, Crisis management protocols: Active shooter, pandemics, cyberattacks
Night Audit: Automation & AI-driven audits, Big Data in night audits: Identifying revenue leakage patterns, Ethical hacking for audit integrity.

UNIT-II   **16 Hours**
Timeshare, Fractional Ownership & Legal Dynamics
Advanced Timeshare Models: Blockchain-based timeshares, Vacation clubs vs. fractional ownership, Legal pitfalls: Indian Contract Act vs. EU Timeshare Directive 2008.
Revenue Psychology in Timeshares: Behavioral economics in selling timeshares, post-pandemic trends: Flexi-ownership demand.

UNIT-III   **14 Hours**
Predictive Pricing & Budget Agility
Neuro-selling for Front Office: Neuro-linguistic programming (NLP) in upselling suites, Dynamic pricing algorithms, Zero-Based Budgeting (ZBB) for Front Office Beyond traditional budgets: Agile forecasting with machine learning, Capital budgeting for tech upgrades,

UNIT-IV   **14 Hours**
AI-Driven Yield & Revenue Ecosystem
Prescriptive Yield Management: AI for demand prediction, Competitive set

(Comp Set) analysis using STR reports, Ethical Yield Maximization, Surge pricing vs. guest trust (Uber vs. Ritz-Carlton case study), Overbooking algorithms: Balancing occupancy and reputation.

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:
- *Cornell's "Hotel Revenue Management" (C. Kimes) – Dynamic pricing.*
- *"Front Office Operations" by Sudhir Andrews – IHM-prescribed.*
- *"AI in Hospitality" (Springer) – IoT security, chatbots.*
- *STR Global Reports – Benchmarking compset data.*
- *Front Office Management – S.K. Bhatnagar (Indian context).*
- *Check-In Check-Out – Gary K. Vallen & Jerome J. Vallen.*
- *Hotel Front Office Management – James A. Bardi.*

Course Title: Accommodation Management – II	L	T	P	Cr.
Course Code: MHH2453	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Adopt smart cleaning and IoT for efficient, sustainable housekeeping.
2. Leverage AI for predictive room maintenance and zero-waste operations.
3. Optimize public spaces with self-cleaning materials and AI audits.
4. Enhance linen management with RFID tracking and upcycling.
5. Advance sustainability through eco-friendly and circular economy practices.

Course Content

UNIT-I   18 Hours
Futuristic Cleaning Systems & Sustainability
Smart Cleaning Technologies, Robotics & Automation: Autonomous vacuum bots, UV-C disinfection drones. IoT-enabled equipment: Sensors for predictive maintenance (vibration, temperature tracking). Green Equipment: HEPA-filter vacuums, chemical-free steam cleaners.
Advanced Surface Science, Nanotech coatings: Self-cleaning glass, antimicrobial surfaces, Laser stain removal for heritage fabrics (vs. traditional methods), Circular economy in material upkeep: Upcycling damaged linens/furniture.

UNIT-II   14 Hours
AI-Driven Room Operations
Hyper-Personalized Guest Room Maintenance, AI room attendants: Predictive cleaning using guest behavior analytics (e.g., Hilton's Connected Room), VIP room algorithms: Dynamic checklists based on guest profiles (allergies, preferences). Zero-Waste Room Cleaning, Closed-loop systems: Refillable amenity dispensers, biodegradable packaging, Blockchain for linen tracking: Transparency in laundry cycles.

UNIT-III   12 Hours
Public Space Design & Contract Strategy
High-Traffic Zone Management, Self-cleaning materials: Photocatalytic tiles in lobbies, AR for public area audits: Google Glass-assisted inspections. Strategic Outsourcing, AI-powered vendor selection: Scoring contract services via Capterra/Trustpilot data. Risk-reward contracts: Penalty clauses for SLA breaches.

UNIT-IV   **16 Hours**
Smart Linen & Uniform Ecosystems
Linen 4.0, RFID-enabled laundry: Real-time par stock optimization. 3D uniform design: Body-scanning for ergonomic staff attire, Data-Driven Discard Management, AI discard algorithms: Predicting linen lifespan via wash-cycle analytics. Upcycling discarded linen: Partnerships with NGOs.

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Andrews, S. (2018). Hotel housekeeping: A training manual (4th ed.). Tata McGraw-Hill.*
- *Jones, T., & Paul, M. (2020). Sustainable hospitality management: Eco-friendly operations in hotels. Routledge.*
- *Raghubalan, G., & Raghubalan, S. (2017). Hotel housekeeping: Operations and management (3rd ed.). Oxford University Press.*
- *Kappa, M. M., Alderfer, J., & Nyheim, P. (2021). Managing housekeeping operations (5th ed.). American Hotel & Lodging Educational Institute.*
- *Singh, A. J., & Kasavana, M. L. (2021). Automation and innovation in hotel operations. CRC Press.*
- *Schneider, M. (2022). Smart facilities management: IoT and AI in hospitality. Springer.*

Course Title: Basics of Business Statistics	L	T	P	Cr.
Course Code: MHH2454	2	0	0	2

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Explain basic statistical concepts, data classification, and measures of central tendency.
2. Analyse data variation and correlation using statistical methods.
3. Apply regression analysis and interpret time series components.
4. Understand probability concepts and solve basic probability problems.

Course Content

Unit-I   **08 Hours**

Introduction to Statistics and Measures of Central Tendency: Definition, Function & Scope of Statistics, Collection of Data, Classification, Frequency Distribution, Diagrammatic and Graphic Presentation of Data. Measures of Central Tendency: Arithmetic Mean, Median, Mode, Geometric Mean and their merits and demerits, Weighted Arithmetic Mean.

Unit-II   **08 Hours**

Measures of Variation and Correlation Analysis: Measures of Variation: Methods of studying variation – Range, Average Deviation, Standard Deviation, Coefficient of Variation. Correlation Analysis: Methods of Studying Correlation – Karl Pearson's Coefficient of Correlation, Spearman's Rank Correlation for Ungrouped Frequency Distribution, Coefficient of Determination.

Unit-III   **07 Hours**

Regression and Time Series Analysis: Regression Analysis: Equation of Regression Lines for Ungrouped Frequency Distribution. Time Series Analysis: Meaning of Time Series, Analysis of Time Series, Components of Time Series, Models of Time Series, Methods of Measuring Secular Trends (T), Methods of Determination of Seasonal Fluctuations (S), Measurement of Cyclical Variations (C), Measurement of Irregular Variations.

Unit-IV   **07 Hours**

Probability and Its Applications: Basic Concepts in Probability: Counting Rules, Permutations and Combinations, Venn Diagram, Events, Set Operations on Events, Dependent and Independent Events, Introduction to Probability, Conditional Probability, Addition and Multiplication Rules of Probability.

Transactional Mode:

Lecture, Demonstration, Problem-Solving, Case Study, Group Discussion, Practical Exercises, Assignments, E-Content, Self-Learning Materials.

Suggested Reading:

- *Kumar, R. (2018). Hotel maintenance management. Frank Bros. & Co.*
- *James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). An introduction to statistical learning: with applications in R. Springer.*
- *Snedecor, G. W., & Cochran, W. G. (1937). Statistical methods. Iowa State University Press.*
- *Caldwell, S. (2006). Statistics unplugged. Cengage Learning.*
- *Spiegelhalter, D. (2019). The art of statistics: How to learn from data. Pelican Books.*
- *Casella, G., & Berger, R. L. (2001). Statistical inference. Duxbury Press.*
- *Wickham, H. (2014). Advanced R. Chapman and Hall/CRC.*
- *Urdan, T. C. (2010). Statistics in plain English. Routledge.*
- *Çetinkaya-Rundel, M., & Hardin, J. (2021). Introduction to modern statistics. OpenIntro.*
- *Herzog, M. H. (2019). Understanding statistics and experimental design. Springer.*

Course Title: Customer Relationship Management	L	T	P	Cr.
Course Code: MHH2455	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand CRM concepts, strategies, and customer interaction frameworks.
2. Analyze customer-centric activities, CRM processes, and business strategies.
3. Evaluate customer lifecycle management and technological tools in CRM.
4. Explore modern e-CRM trends and IT-driven customer relationship structures.
5. Assess CRM profitability and its role in long-term business success.

Course Content

Unit I   16 Hours
Introduction To CRM
Customer Relationship Management: CRM Definition, Need and Importance: Conceptual Framework of Customer. Relationship Management; the Value Pyramid, Customer Interaction Cycle, Customer Profiling and Total Customer Experience, Goals of a CRM Strategy and Obstacles.

UNIT II   16 Hours
Customer Centric Activities
CRM Solutions Map, Discussing People, Processes and Technology, CRM myths. CRM as a Business Strategy: CRM - Issues and Strategies; Winning Markets through Effective CRM; CRM as a business strategy. CRM Process, Effective Customer Relation Management through Customer Knowledge Management; Customer Interaction Management, Call Centre management in CRM.

UNIT III   15 Hours
Customer and Social Responsibility
Customer Centricity in CRM-Concept of Customer centricity, Customer touch points, Customer Service. Measuring Customer life time value-. Customer life cycle Management. Technological Tools for CRM and Implementation: Data Mining for CRM.

UNIT IV   13 Hours
Modern Day CRM
Changing Patterns of e-CRM Solutions in the Future; Structuring a Customer Focused IT Organization to Support CRM, Organizational Framework for Deploying Customer Relationship; measuring profitability.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Peppers, D., & Rogers, M. (2020). Managing customer relationships: A strategic framework (3rd ed.). Wiley.*
- *Kotler, P., & Keller, K. L. (2022). Marketing management (16th ed.). Pearson.*
- *Buttle, F., & Maklan, S. (2019). Customer relationship management: Concepts and technologies (4th ed.). Routledge.*
- *Greenberg, P. (2021). CRM at the speed of light (6th ed.). McGraw-Hill.*
- *Kumar, V., & Reinartz, W. (2022). Customer relationship management: A databased approach (3rd ed.). Springer.*
- *Winer, R. S., & Dhar, R. (2023). Customer centricity: Focus on the right customers for strategic advantage. Wharton School Press.*
- *Chaffey, D., & Ellis-Chadwick, F. (2023). Digital marketing (8th ed.). Pearson.*
- *Harvard Business Review. (2022). HBR's 10 must-reads on customer experience. HBR Press.*
- *Verhoef, P. C., et al. (2021). Creating value with big data analytics: Making smarter marketing decisions. Routledge*

Course Title: Hospitality Internet of Things	L	T	P	Cr.
Course Code: MHH2456	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1 Explain core IoT architecture, components, and protocols in hospitality.
2 Design smart guest experiences using IoT technologies.
3 Evaluate IoT's role in improving operational efficiency.
4 Analyze cybersecurity and ethical issues in IoT applications.
5 Propose IoT solutions with ROI and implementation insights.

Course Content

Unit-I   18 Hours
Foundations of IoT in Hospitality
Introduction to IoT: Definition, evolution, and significance in hospitality, Key components: Sensors, actuators, cloud platforms, Case Study: Marriott's IoT-powered guest rooms. IoT Architecture & Protocols: Layered architecture (perception, network, application), Communication protocols, Case Study.

Unit-II   14 Hours
IoT Applications in Guest Services
Smart Guest Experiences: Mobile key systems (e.g., Hilton Digital Key), Voice-controlled rooms (Amazon Alexa, Google Home), Case Study. Personalization through IoT: Beacon technology for hyper-personalized offers, Wearables for seamless service, AI/AR/VR/MR in Hospitality.

Unit-III   16 Hours
Operational Efficiency & IoT
Energy & Asset Management: Smart HVAC systems, Predictive maintenance for equipment, Case Study. IoT in F&B Operations: Smart kitchens with IoT-enabled inventory tracking, RFID for reducing food waste. Service automation in the Hospitality Industry.

Unit-IV   12 Hours
Security, Ethics & Future Trends
Cybersecurity & Privacy Risks: GDPR compliance in guest data collection, Mitigating IoT cyber threats (e.g., Mirai botnet). Ethical Implications: Bias in AI-driven services, Guest data ownership debates. Future Trends: Metaverse integration in hospitality, Sustainable IoT (e.g., solar-powered sensors). Ethical Constraints and human & automation synchronization.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Minerva, R., Biru, A., & Rotondi, D. (2023). IoT for smart hotels: A practical guide. Wiley.*
- *Özdemir, V., & Hekim, N. (2022). Digital transformation in hospitality: IoT and AI applications. Routledge.*
- *Verma, S., & Gupta, R. (2021). Internet of Things in the hotel industry. CRC Press.*
- *Wamba, S. F. (2020). Hospitality 4.0: IoT and smart operations management. Springer.*
- *Zikopoulos, P., & Eaton, C. (2021). Understanding big data for hospitality IoT. McGraw-Hill.*

Semester - III

Course Title: Ethics & IRP	L	T	P	Cr.
Course Code: MHH3500	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand ethical principles, IPR fundamentals, and global legal frameworks.
2. Analyze corporate and research ethics, including CSR, ESG, and patent practices.
3. Examine global, digital, and professional ethics in diverse industries.
4. Evaluate ethical challenges in emerging tech, AI, and big data.
5. Apply ethical principles in bioethics, IP valuation, and open-source innovation.

Course Content

Unit I   16 Hours
Foundations of Ethics & IPR
Ethical Principles: Definitions, Importance, Ethical decision-making frameworks, IPR Fundamentals: Types - Patents, copyrights, trademarks, trade secrets, Legal frameworks: TRIPS, Berne Convention, Tech Ethics: AI bias, digital privacy (GDPR, India's DPDP Act), Ethical design principles (IEEE guidelines).

Unit II   16 Hours
Business & Research Ethics
Corporate Ethics: CSR vs. ESG (UN SDGs alignment), Ethical governance, IPR in Practice: Patent drafting & infringement (USPTO/India Patent Office guidelines), Fair use & plagiarism (Turnitin/Academic Integrity norms), Emerging Tech: Ethical AI deployment (EU AI Act vs. India's Digital India framework), Big Data ethics.

Unit III   14 Hours
Global & Professional Ethics
Cross-Cultural Ethics: Cultural relativism vs. universal norms, International IP treaties, Digital Ethics: Cybersecurity ethics (Ethical hacking principles), AI accountability (Algorithmic transparency), Leadership Ethics, Ethical leadership traits, Professional codes (AMA, AICPA).

Unit IV   14 Hours
Specialized Applications
Bioethics: CRISPR ethics, Clinical trials, Healthcare equity, Tech Transfer & Innovation, IP valuation methods (Cost, market, income approaches), Open-source ethics, Ethics vs. Profit.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Beauchamp, T. L., & Bowie, N. E. (2020). Ethical theory and business (10th ed.). Pearson.*
- *Lessig, L. (2021). Remix: Making art and commerce thrive in the hybrid economy. Penguin.*
- *Singer, P. (2015). Ethics in the real world. Princeton UP.*
- *Kumar, N. (2022). Intellectual property rights in India. LexisNexis.*
- *Bostrom, N. (2014). Superintelligence: Paths, dangers, strategies.*

Course Title: Research Methodology	L	T	P	Cr.
Course Code: MHH3501	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand research concepts, types, and the overall research process.
2. Develop research designs, problem statements, and hypotheses effectively.
3. Conduct literature reviews using academic sources and theoretical frameworks.
4. Apply data collection methods, sampling techniques, and measurement tools.
5. Analyze qualitative data ethically using thematic methods and analysis tools.

Course Content

Unit 1   16 Hours
Introduction to Research and Research Design
Concepts: Meaning, objectives, motivations, characteristics, and limitations of research, Types of Research: Fundamental vs. applied research. Qualitative vs. quantitative. Historical, descriptive, experimental, Research Process: Steps from problem identification to reporting. Research Design: Essentials, types (experimental, quasi-experimental, cross-sectional), Errors in design, Problem Statement & Hypotheses: Null, Alternate, and Formulation techniques. Literature Review: Purpose, sources (academic databases like Scopus/Web of Science), Theoretical frameworks. Literature Review Writing.

Unit 2   16 Hours
Data Collection, Sampling & Analysis
Measurement & Scaling: Likert scales, semantic differential, Sampling Techniques: Probability (stratified, cluster) vs. non-probability (snowball, purposive), Instrument Design: Questionnaires, interviews (structured/semi-structured). Validity & reliability tests (Cronbach's alpha, pilot testing). Techniques: Qualitative analysis, Quantitative analysis, Tools: Introduction to Data analysis tools, Ethics: Informed consent, confidentiality. MS Excel as tool for analysis.

Unit 3   16 Hours
Advanced Research Designs, Academic Writing & Proposals
Complex experimental designs (RCTs, quasi-experimental), Ethnographic/participatory action research, Fieldwork in Indian contexts. Research proposal structure, Literature synthesis techniques, Citation management: AI based citation methods (like: Zotero/Mendeley), Different

parameters of citations, Research Grants and proposal formats, Research writing.

Unit 4   12 Hours
Dissemination Strategies with Ethics & Proposal Writing

Publications: Different journal, peer-review journals, Selection, Publication process, Presentation: Preparations, Displaying skills, Presentation skills, Policy brief development, LSE Benchmark: Research communication. Ethics: ICSSR guidelines, SCOPUS guidelines, Plagiarism and AI Content, Plagiarism detection, Use of AI to format and prepare research papers, Paper publication guidelines. Proposals, Structure drafting according to guidelines and standards.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Creswell, J. W., & Creswell, J. D. (2023). Research design: Qualitative, quantitative, and mixed methods approach (6th ed.). SAGE.*
- *Kumar, R. (2019). Research methodology: A step-by-step guide for beginners (5th ed.). SAGE.*
- *Bhattacharyya, D. K. (2017). Research methodology (2nd ed.). Excel Books.*
- *Silverman, D. (2020). Qualitative research (5th ed.). SAGE.*
- *Bryman, A. (2016). Social research methods (5th ed.). Oxford University Press.*
- *Neuman, W. L. (2014). Basics of social research: Qualitative and quantitative approaches (3rd ed.). Pearson.*
- *Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE.*
- *Sword, H. (2017). Air & light & time & space: How successful academics write. Harvard University Press.*
- *Belcher, W. L. (2019). Writing your journal article in twelve weeks (2nd ed.). University of Chicago Press.*
- *Bardach, E., & Patashnik, E. M. (2020). A practical guide for policy analysis (6th ed.). CQ Press.*
- *European Commission. (2018). GDPR guidelines for research.*

Course Title: Data Analysis – I	L	T	P	Cr.
Course Code: MHH3502	1	0	0	1

Total Hours: 15

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Determine suitable data analysis methods for research.
2. Use descriptive statistics to interpret datasets.
3. Conduct basic inferential analysis with statistical software.
4. Present research findings through effective data visualization.

Course Content

Unit-I   **03 Hours**
Foundations of Data Analysis
Research Data Types: Quantitative vs qualitative data in hospitality. Descriptive Statistics: Measures of central tendency & dispersion. Data Cleaning: Handling missing values in Tripadvisor datasets.

Unit-II   **05 Hours**
Analytical Techniques
Correlation Analysis. Basic Hypothesis Testing: t-tests, etc for service quality comparisons, p-Value significance and interpretation. Regression analytics

Unit-III   **04 Hours**
Visualization
Data Storytelling: Choosing charts for different audiences. Workshop: Creating dashboards. Data Visualization techniques and significance. Importance of data visualization.

Unit-IV   **03 Hours**
Applied Research
Software overview: SPSS/PSPP, Capstone Project, MS Excel, R-studios, different charts and integrated models for data findings and conclusions.

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Interactive discussions, Process mapping exercises, analysis software demos.

Suggested Reading:
- *Field, A. (2023). Discovering Statistics Using IBM SPSS (6th ed.). Sage.*
- *Hair, J. F. (2022). Essentials of Business Research Methods. Routledge.*
- *Albright, S. C. (2023). Business Analytics (7th ed.). Pearson.*
- *Kumar, R. (2022). Research Methodology (5th ed.). Sage India.*

Course Title: Data Analysis – I (Lab)	L	T	P	Cr.
Course Code: MHH3503	0	0	2	1

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Prepare and clean datasets for analysis.
2. Perform statistical analyses using software.
3. Develop professional dashboards for business decisions.
4. Communicate data insights effectively to non-technical audiences.

Course Content

1. Data Wrangling:
1.1   Importing/Exporting Data: Practice: Convert STR reports to analyzable formats
1.2   Cleaning Messy Data: Fix data sets (missing values, outliers)
1.3   Data Transformation: Data coding, Code Book

2. Statistical Analysis
2.1   Descriptive Statistics
2.2   Correlation Analysis
2.3   Basic Forecasting
2.4   Regression Analysis

3. Visualization
3.1   Static Charts
3.2   Interactive Dashboards

4. Applied Projects
4.1   Team project
4.2   Present findings to "management"
4.3   Data findings and discussion writing.

Transactional Mode:

Brain Storming, Demonstration, Practical case studies, Interactive discussions, analysis software demos, Hands on experience.

Suggested Reading:

- *Field, A. (2023). Discovering Statistics Using IBM SPSS (6th ed.). Sage.*
- *Hair, J. F. (2022). Essentials of Business Research Methods. Routledge.*
- *Albright, S. C. (2023). Business Analytics (7th ed.). Pearson.*
- *Kumar, R. (2022). Research Methodology (5th ed.). Sage India.*

Course Title: Entrepreneurship Management	L	T	P	Cr.
Course Code: MHH3504	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand entrepreneurship concepts, types, and government support systems.
2. Develop entrepreneurial strategies through creativity, innovation, and opportunity recognition.
3. Apply project management techniques for idea generation, analysis, and selection.
4. Explore financing options, including venture capital and private equity.
5. Implement project planning, control, and evaluation using PERT and CPM models.

Course Content

Unit I   **15 Hours**
Introduction to Entrepreneur
Concept, Characteristics, functions of an entrepreneur, Entrepreneur Manager, Types of entrepreneurs, Entrepreneurial Mind Set, Key attributes of an entrepreneur, desirable and acquirable traits and behaviors. Rural entrepreneurship, social entrepreneurship, Entrepreneurship Development, Entrepreneurial support systems and role of government in Entrepreneurship Development.

Unit II   **17 Hours**
Entrepreneurial Strategy
Creativity and Business Idea Generation: Concept of creativity, ideas from trend analysis, sources of new ideas, Methods of generating new ideas, Creative problem solving, creativity and entrepreneurship. Entrepreneurial Innovation: Concept and types, Opportunity Recognition and opportunity assessment plan, product planning and development process.

UNIT III   **14 Hours**
Project Management
Project Management: Concept, facets, and Key Issues of project management. Generation and screening of project ideas. Project Analysis: Market and demand analysis, technical analysis, financial estimates and projection. Project Selection: Investment criteria, Risk analysis, Social Cost Benefit analysis.

UNIT IV   **14 Hours**
Financing and Control
Project Financing: Financing of projects, Concept of Venture Capital in detail, Difference between Venture Capital, and Private Equity. Project Implementation:

Project planning and control. Network techniques for project management: PERT and CPM Models, Project Review: Post Audit and Administrative Aspects.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2023). Entrepreneurship (11th ed.). McGraw-Hill.*
- *Kuratko, D. F. (2023). Entrepreneurship: Theory, process, practice (11th ed.). Cengage.*
- *Barringer, B. R., & Ireland, R. D. (2023). Entrepreneurship: Successfully launching new ventures (7th ed.). Pearson.*
- *Ries, E. (2021). The lean startup: How today's entrepreneurs use continuous innovation. Currency.*
- *Kerzner, H. (2022). Project management: A systems approach to planning, scheduling, and controlling (13th ed.). Wiley.*
- *Gompers, P., & Lerner, J. (2021). The venture capital cycle (3rd ed.). MIT Press.*
- *Kumar, S. A. (2023). Project management and control. PHI Learning.*
- *Harvard Business Review. (2023). HBR's 10 must-reads on entrepreneurship. HBR Press.*

Course Title: Environmental Sustainability in Hospitality	L	T	P	Cr.
Course Code: MHH3505	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:
1 Explain key sustainability principles relevant to hospitality.
2 Evaluate sustainable practices in energy, water, and waste.
3 Analyze eco-friendly F&B strategies for environmental impact.
4 Assess green certifications and eco-label implementation.
5 Propose CSR and stakeholder strategies for sustainability.

Course Content

Unit 1   **16 Hours**
Introduction to Sustainability in Hospitality

Definition and Importance of Sustainability: Triple Bottom Line (People, Planet, Profit), Global sustainability challenges in hospitality. Sustainable Development Goals (SDGs) and Hospitality: Relevance of SDGs (e.g., SDG 12: Responsible Consumption and Production), Case studies of hotels aligning with SDGs. CSR and sustainability.

Unit 2   **16 Hours**
Sustainable Operations in Hospitality

Smarter Operational Activities. Integration of automated services for sustainability. Energy and Water Conservation: Best practices for reducing energy and water consumption, Renewable energy options (solar, wind). Waste Management: Zero-waste strategies, Recycling and composting in hotels

Unit 3   **16 Hours**
Sustainable Food and Beverage Practices

Sustainable Sourcing: Locally sourced and organic food, Fair trade and ethical sourcing. Reducing Food Waste: Inventory management techniques, Donation and composting programs. Human resource Management: Greener options in F&B human resource, Alignment with sustainability goals of the organization.

Unit 4   **12 Hours**
Green Building and Certification

Green Building Standards: LEED certification for hotels, Energy-efficient building design. Eco-Labels and Certifications: Green Key, Earth Check, and other certifications, Benefits and challenges of certification. Sustainability over traditional approach: Government benefits, Schemes and subsidies.

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Sloan, P., Legrand, W., & Chen, J. S. (2022). Sustainability in the hospitality industry (3rd ed.). Routledge.*
- *Jones, P., Hillier, D., & Comfort, D. (2021). Sustainability in the global hotel industry. Emerald Publishing.*
- *Harris, R., & Griffin, T. (2020). Sustainable hospitality and tourism as motors for development. Routledge.*
- *Bohdanowicz, P., & Zientara, P. (2019). Corporate social responsibility in the hospitality industry. Springer.*
- *Weaver, D. (2021). Sustainable tourism: Theory and practice (2nd ed.). Oxford University Press.*

Course Title: Organizational Behavior	L	T	P	Cr.
Course Code: MHH3506	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1   Diagnose individual/group behavior patterns affecting hospitality service delivery.
2   Formulate leadership strategies tailored to hotel operational contexts.
3   Design culture-change initiatives for hospitality organizations.
4   Evaluate solutions for contemporary OB challenges.

Course Content

Unit 1   16 Hours
Foundations of Individual & Group Behaviour

Introduction to OB in Hospitality: Definition, evolution, and significance, Link between OB and service quality in hotels. Individual Behavior: Personality theories (Big Five, MBTI), Attitudes, perception, and decision-making biases, Case Study: How personality traits predict guest service performance. Motivation in Hospitality: Content theories (Maslow, Herzberg), Process theories (Expectancy, Equity), Application: Designing incentive programs for hotel staff. Group Dynamics: Stages of group development (Tuckman's Model), Team roles (Belbin's Theory), Hospitality Focus: Cross-functional teams in event management

Unit 2   16 Hours
Leadership & Organizational Culture

Leadership Theories: Trait vs. behavioral theories, Transformational leadership in luxury hotels, Case Study. Power & Politics: French & Raven's power bases, Ethical use of power in hotel hierarchies, Scenario Analysis: Handling union disputes in resorts. Organizational Culture: Schein's cultural layers, Aligning culture with brand standards (e.g., Four Seasons vs. Airbnb). Communication Systems: Formal vs. informal networks, Digital communication challenges in hotels, Workshop: Crafting crisis communication for a food safety incident

Unit 3   16 Hours
Organizational Change & Stress Management
Change Management: Lewin's 3-Step Model, Kotter's 8-Step Process, Case Study. Resistance to Change: Causes and mitigation strategies, Hospitality Example: Transitioning to contactless check-ins, Workplace Stress: Job demands-resources model, Burnout in high-turnover roles (e.g., front desk),

Data Dive: Analyzing turnover rates in 5-star hotels. Well-being Initiatives: Flexible scheduling in hotels, Best Practices.

Unit 4   **12 Hours**
Contemporary Issues in Hospitality Organizational Behaviours

Cross-Cultural OB: Hofstede's dimensions in global hotel chains, Case Study. Ethical Dilemmas: Wage theft in hospitality, Debate: "Should Hotels Unionize?" Technology & OB: AI's impact on employee autonomy, Case Study. Future of Work: Gig economy in hotels

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Robbins, S. P., & Judge, T. A. (2023). Organizational behavior (18th ed.). Pearson.*
- *Mullins, L. J. (2022). Hospitality management & organizational behavior (6th ed.). Routledge.*
- *Schein, E. H. (2021). Organizational culture and leadership (6th ed.). Wiley.*
- *Luthans, F., et al. (2021). Positive organizational behavior. McGraw-Hill.*

Course Title: Tourism Resources of India	L	T	P	Cr.
Course Code: MHH3507	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:
1 Classify India's diverse tourism resources using UNESCO frameworks.
2 Evaluate the socio-economic impact of cultural/heritage tourism.
3 Propose sustainable models for adventure/wellness tourism.
4 Forecast future challenges using current infrastructure/data trends.

Course Content

Unit 1   16 Hours
Introduction to India's Tourism Landscape

Concept of Tourism Resources: Definition, classification (natural, cultural, man-made), UNESCO's criteria for heritage recognition. Geographical Diversity: Himalayan, coastal, desert, and plateau ecosystems, Case Study. Historical Evolution of Tourism: Ancient pilgrimage routes (Char Dham, Buddhist circuit), Colonial influences on hill stations (Darjeeling, Ooty). Policy Framework: Role of Ministry of Tourism, Incredible India campaigns, Data Analysis

Unit 2   16 Hours
Cultural & Heritage Resources

Architectural Marvels, Living Cultures, Festivals, Religious Tourism, Major circuits, Museums & Creative Industries.

Unit 3   16 Hours
Natural & Adventure Resources
Wildlife Tourism: Tiger reserves (Ranthambore, Bandhavgarh), Ethical Discussion. Biosphere Reserves, Western Ghats vs. Sundarbans ecosystems, Case Study. Adventure Tourism: Trekking (Himalayan trails), water sports (Goa, Rishikesh), Safety Analysis: 2023 Uttarakhand glacier tragedy. Wellness Tourism: Ayurveda in Kerala, yoga tourism (Rishikesh as global hub)

Unit 4   12 Hours
Emerging Trends & Challenges

Niche Tourism: Wine tourism, Infrastructure & Connectivity: UDAN scheme for regional airports, Crisis Management: Pandemic recovery strategies, Future Projections: Role of AI in personalized tourism, Chatbots, Management systems.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Singh, L. K. (2022). Tourism resources of India (4th ed.). Kanishka Publishers.*
- *Kamra, K. K., & Chand, M. (2021). Basics of tourism in India. Commonwealth.*
- *Menon, A. G. K. (2020). Cultural heritage of India. Niyogi Books.*
- *Bhatia, A. K. (2023). Adventure*

Course Title: Business Communication	L	T	P	Cr.
Course Code: MHH3508	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand communication models and barriers in organizations.
2. Write clear business documents using proper format and tools.
3. Use effective verbal and nonverbal skills in business settings.
4. Apply cross-cultural communication in global contexts.

Course Content

Unit 1   **16 Hours**
Communication Theory
Meaning, Significance & Scope of Communication: Models of Communication Process; Filtering in Communication; Words &Meanings, Perception & Reality, Barriers of Communication. Flow of information in business organizations & role of effective commutation in
improving it

Unit 2   **16 Hours**
Business Writing

Business Writing Principles for Clear Business Writing; Adoption, Word Selection, Sentence Construction. Qualities of Business Correspondence, Letters. Important Business correspondence; Letters. Important Business correspondence; Memos, Reports, Inquires and Responses, Persuasive Requests, Sales Letters, Facsimile, Curriculum Vitae, Email, Use of MS Office in Business Communication. Business Report Writing – Organization and Makeup of Different Types of Reports.

Unit 3   **16 Hours**
Verbal Communication
Oral Business Communication: Dictation, Telephone conversation, public speaking & oral reporting, Interviews, demonstration, Meeting-Process & Organization of Meetings, Group Discussions. Nonverbal Communication: Body Language, Importance of Gestures in Communication. Reading Body Language in Business Communication

Unit 4   **12 Hours**
Cross- Cultural Communication

Concepts of Cultures, Function of Culture, Impact of Culture on Communication, Important expressions in Cross Cultural Communication.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Snell shelagh & Carpenter Jeff, "Communication in Travel & Tourism"*
- *Hodder& Stoughton ltd.*
- *Kent by Page Bros. (Norwich) Ltd. 1990.*
- *Leisikar V Raymond & Petit d. John. "Business Communication" Richard D Irwin, 1992.*
- *Allan Peas, Body Language.*
- *Desmand Morris, People Watching.*
- *RK Maddhukar, Business Communication, Vikas Publishing House, New Delhi.*

Course Title: Human Resource Management	L	T	P	Cr.
Course Code: MHH3509	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand the fundamentals of human resource planning and job design.
2. Describe recruitment and selection methods, and explain placement and orientation processes.
3. Identify training needs and apply appropriate training methods and evaluation.
4. Explain development programs and their role in career and management growth.

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Course Content

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Unit 1   **16 Hours**
Introduction to Humar Resources

Definition of role of human resources development role of human manager, Manpower planning definition need for manpower planning analyzing & forecasting human resources demand and supply, Job Design: job analysis job description job enlargement / job rotation enrichment job specification.

Unit 2   **16 Hours**
Recruitments and Placement
Sources of Recruitments: Internal & external selection process and techniques. Application. Interview; types, Test types, Group selection process, references, job offers Induction – orientations program, general property orientation; specific job orientation, follow up and evaluation

Unit 3   **16 Hours**
Training
Meaning and advantages. Purpose of training analyzing training need types or method of training on the job: of the job aids used while training, evaluations and monitoring of training.

Unit 4   **12 Hours**
Development Program

Function of a development program in HR, Career development program in hospitality & tourism industry, management development& organization strategy, organizing & implementing management development program and mentoring

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Armstrong, M. (2009) Armstrong's handbook of human resource management" (11th edition). London: Kogan Page*
- *Dessler, Garg, (2002) "Human Resource Management" (5th edition), Pearson education*
- *K. Aswathappa (2015) "Human Resource Management" (2nd edition), Tata McGraw Hill*
- *Rao V.S.P. (2014) "Human Resource Management" (1st edition) Excel books*

Semester IV

Course Title: Internship (8 Weeks)	L	T	P	Cr.
Course Code: MHH4550	0	0	0	4

Total Time: 8 Weeks

Course Content

1. Evaluation of Students for Professional Training

- A total training of 08 weeks in hotels, restaurants, QSR's.

- Total evaluation of 100 Marks.

- The student needs to maintain a log-book.

- Criteria for evaluation

  o Attendance/Punctuality – 10

  o Proficiency in organizing departmental task - 10

  o Initiative/responsibility exhibited - 10

  o Interpersonal relations - 10

  o Behavior/attitude - 10

  o Log Book - 25

  o Viva – Voce – 25

2. Submission Post Completion of Internship

  o Log Book

  o Training Completion Certificate

  o Training Project

  o PowerPoint Presentation for Viva-Voce.

Course Title: Research Project	L	T	P	Cr.
Course Code: MHH4551	0	0	24	12

Total Hours: 120

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Structure research projects with essential sections and APA 7th references.
2. Ensure originality, maintain plagiarism below 10%, and follow submission guidelines.
3. Format reports with specified fonts, word limits, and structured headings.
4. Include relevant visuals like tables, graphs, and statistics appropriately.
5. Submit both hardbound (black with gold embossing) and soft copy, along with a presentation.

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Course Content

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1. ARRANGEMENT OF CONTENTS:
The research project of the student needs to be arranged in the following format:

- Cover Page & Title Page
- Certificate of Declaration
- Table of Contents
- Research Objectives
- Abstract
- Introduction
- Literature review
- Research methodology
- Data collection & analysis
- Interpretation
- Conclusion
- Suggestion
- References (In APA 7th Format)
- Appendices

The table and figures should be introduced in the appropriate places and a table of figures and tables should be added with table of contents if necessary.

2. Guidelines for project report submission:
The following guidelines need to be adhered to for preparing and submitting the project report:

- The final Project report must be original in nature and should not have been published or under consideration to be printed elsewhere or submitted by the student to any University or organization. Plagiarism should be well within the permissible limits (less than 10%)
- The cover page includes the student detail followed with index/table of

contents.

- The project report must be in MS-Word document printed format only.
- The font size should be as follows: -
    - Title and Name of Author – Times New Roman, Size: 16, Bold
    - Main Heading – Times New Roman, Size:14, Bold
    - Sub-Heading – Times New Roman, Size: 12, Bold
    - Content – Times New Roman, Size: 12, Normal Text
    - Table Heading – Times New Roman, Size: 10, Bold
    - Table Content – Times New Roman, Size: 10
- The range of words should be between 10, 000 to12, 000
- The photographs, tables, graphs & statistics may be used at appropriate location.
- The submission of 1 hard bound copy of the dissertation/project report is mandatory.
- The submission date for both soft copy & hard copy are same.
- The color of the hard bound must be black & golden embossed.
- The students have to prepare <15 slides, power point presentation at the time of presentation of dissertation report.

Course Title: DATA ANALYSIS - II	L	T	P	Cr.
Course Code: MHH4552	1	0	0	1

Total Hours: 15

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Apply predictive and multivariate analysis for hospitality forecasting and segmentation.
2. Utilize big data and text mining tools for competitive pricing and guest insights.
3. Implement prescriptive analytics for AI-driven demand prediction and optimization.
4. Leverage strategic decision systems with KPIs and geo-analytics for site selection.
5. Conduct end-to-end operational data analysis and present key findings effectively.

Course Content

UNIT I   **04 Hours**
Predictive & Multivariate Analysis
Advanced Statistical Techniques: Multiple regression (RevPAR forecasting), ANOVA/MANOVA, Factor analysis, Machine Learning Foundations: Supervised vs. unsupervised learning, Decision trees for customer segmentation.

UNIT II   **04 Hours**
Big Data & Text Mining
Hospitality-Specific Applications, Web scraping for competitive pricing data, Tools & Ethics: Tableau Prep for data blending, GDPR compliance in guest data mining.

UNIT III   **03 Hours**
Prescriptive Analytics
Optimization Models: Linear programming for staff scheduling, AI Applications: Chatbot intent analysis, Demand prediction with neural networks.

UNIT IV   **04 Hours**
Strategic Decision Systems
Integrated Analytics: Balanced scorecard with KPIs, Geo-analytics for site selection, End-to-end analysis of a hotel's operational dataset, Pitch findings.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Interactive discussions, Process mapping exercises, analysis software demos.

Suggested Reading:

- *James, G., et al. (2023). An introduction to statistical learning (2nd ed.). Springer.*
- *James, G., et al. (2023). An introduction to statistical learning (2nd ed.). Springer.*
- *Shmueli, G., et al. (2023). Data mining for business analytics (4th ed.). Wiley.*
- *Magnini, V. (2021). Big data and innovation in tourism, travel and hospitality. Springer.*
- *Noone, B. (2023). Revenue management for hospitality and tourism. Goodfellow.*

Course Title: Data Analysis – II (Lab)	L	T	P	Cr.
Course Code: MHH4553	0	0	2	1

Total Hours: 30

Course Learning Outcomes: After completion of this course, the learner will be able to:

1. Master data wrangling and visualization for hotel analytics using industry tools.
2. Apply predictive modeling techniques like regression, segmentation, and A/B testing.
3. Leverage AI applications for sentiment analysis and chatbot training.
4. Execute applied projects, present findings, and document data-driven insights.

Course Content

1. Data Wrangling & Visualization
1.1   Cleaning Hotel Data
1.2   Visual Storytelling
1.3   Industry Tools
2. Predictive Modeling
2.1   Regression Analysis
2.2   Guest Segmentation
2.3   A/B Testing
3. AI Applications
3.1   Sentiment Analysis
3.2   Chatbot Training
4. Applied Projects
4.1   Team project
4.2   Present findings to "management"
4.3   Data findings and discussion writing.

Transactional Mode:
Brain Storming, Demonstration, Practical case studies, Interactive discussions, analysis software demos, Hands on experience.

Suggested Reading:

- *Field, A. (2023). Discovering Statistics Using IBM SPSS (6th ed.). Sage.*
- *Hair, J. F. (2022). Essentials of Business Research Methods. Routledge.*
- *Albright, S. C. (2023). Business Analytics (7th ed.). Pearson.*
- *Kumar, R. (2022). Research Methodology (5th ed.). Sage India.*

Course Title: Travel Agency & Tour Operations	L	T	P	Cr.
Course Code: MHH4554	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:
1 Analyze the operational and legal frameworks governing travel agencies.
2 Design competitive tour packages using costing and marketing principles.
3 Evaluate crisis management strategies for tour operations.
4 Predict future industry trends shaping travel agencies.

Course Content

UNIT I   **17 Hours**
Fundamentals of Travel Agencies

Introduction to Travel Trade: Definition, historical evolution, and types of travel agencies (IATA, non-IATA), Role of travel agencies in tourism supply chain. Organizational Structure: Departments and functions (reservations, marketing, finance), Case Study. Legal Framework: Licensing requirements (TAAI, DOT regulations), Consumer protection laws and liability issues. Technology in Travel Agencies: Global Distribution Systems (Amadeus, Sabre, Galileo)

UNIT II   **15 Hours**
Tour Packaging & Operations

Tour Package Design: Components (transportation, accommodation, activities). Pricing Strategies: Costing models (markup, commission-based), Dynamic pricing in tour operations. Supplier Relations: Negotiation with hotels, airlines, and local vendors. Specialized Tours: Niche products (culinary tours, wildlife safaris, MICE tourism).

UNIT III   **13 Hours**
Marketing & Customer Relationship Management

Marketing Strategies: Digital marketing, Customer Service Excellence: Handling complaints, service recovery, Loyalty Programs: Frequent traveler programs and partnerships, Emerging Trends: Virtual reality tours, AI chatbots for customer service.

UNIT IV   **15 Hours**
Global Trends & Challenges

Sustainable Tour Operations: Carbon offset programs, eco-certifications, Crisis Management: Pandemic response, natural disasters, Regulatory Environment, International travel laws (visa regimes, health advisories)

Transactional Mode:
Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Holloway, J. C., & Humphreys, C. (2022). The business of tourism (11th ed.). Pearson.*
- *Walker, J. R., & Walker, J. (2021). Tourism: Concepts and practices (2nd ed.). Kendall Hunt.*
- *Mancini, M. (2023). Selling destinations (6th ed.). Cengage.*
- *Tarlow, P. (2022). Tourism risk management. Goodfellow.*

Course Title: Proficiency in Teaching	L	T	P	Cr.
Course Code: MHH4555	4	0	0	4

Total Hours: 60

Learning Outcomes: After completion of this course, the learner will be able to:

1. Understand teaching theories, learning processes, and instructional methodologies.
2. Apply learner-centric strategies to create inclusive and engaging classrooms.
3. Integrate technology in teaching through online, blended, and flipped learning.
4. Utilize assessment tools for measuring student progress and learning outcomes.
5. Develop reflective teaching practices for continuous professional growth.

Course Content

UNIT I   17 Hours
Teaching Aptitude

Overview of the course and its objectives – Specify 1-2 theories or give overview of theories of learning for teaching - Understanding the role of the teacher and student in the learning process - Writing clear and measurable learning outcomes - Meaning Nature, definition, scope, and importance Pedagogy, Andragogy, and Heutagogy – Skills-based approach to teaching (Teaching skills), Micro-teaching, Macro teaching. Methods and approaches of teaching - CAM, Structure-function approach, Synthetic and Analytic approach, Jurisprudential inquiry model

UNIT II   15 Hours
Lerner's Centric Teaching

Understanding the diverse needs and backgrounds of learners - Creating an inclusive and supportive learning environment - Facilitating active learning and student engagement strategies, Lectures, discussions, and demonstrations - Group work, collaborative learning, and cooperative learning - Problem-based learning, case studies, and simulations

UNIT III   13 Hours
Technology and Teaching

Integrating technology tools into instruction – Online, blended learning, flipped learning, and M-learning approaches - Using educational software and platforms effectively, Formative and summative assessment methods – Difference between Assessment, Evaluation and Measurement, E-assessment tools,

UNIT IV   **15 Hours**
Reflective Teaching

The importance of reflective practice in teaching - Self-assessment and evaluation of teaching effectiveness –Need for Professional development - Teaching in multicultural and international classrooms - Culturally responsive teaching, practices, Meaning, Definition of teaching model - Assumptions, Importance, Role, and type of teaching models. Historical teaching model, Philosophical model of teaching.

Transactional Mode:

Case Based Teaching, Brain Storming, Demonstration, Interactive lectures, Practical case studies, Industry guest speakers, Interactive discussions, Process mapping exercises, Property management software demos, Industry expert sessions.

Suggested Reading:

- *Armstrong, P. (2020). Bloom's taxonomy: A forty-year retrospective. Harvard Education Press.*
- *Biggs, J., & Tang, C. (2022). Teaching for quality learning at university (5th ed.). Open University Press.*
- *Hattie, J., & Yates, G. (2014). Visible learning and the science of how we learn. Routledge.*
- *Tomlinson, C. A. (2017). How to differentiate instruction in academically diverse classrooms (3rd ed.). ASCD.*
- *Brookfield, S. D. (2017). Becoming a critically reflective teacher (2nd ed.). Jossey-Bass.*
- *Bergmann, J., & Sams, A. (2023). Flip your classroom: Reach every student in every class every day (2nd ed.). ISTE.*
- *Wiggins, G., & McTighe, J. (2023). Understanding by design (3rd ed.). ASCD.*
- *Stiggins, R. J. (2020). Classroom assessment for student learning: Doing it right—using it well (3rd ed.). Pearson.*
- *Zeichner, K. M., & Liston, D. P. (2021). Reflective teaching: An introduction (2nd ed.). Routledge.*