CENTRAL UNIVERSITY OF PUNJAB
BATHINDA

MBA

(Agribusiness)

Batch: 2025-27

Department of Applied Agriculture
School of Basic Sciences

Graduate Attributes

The graduates of the Master of Business Administration in Agribusiness will acquire the following:

Context of Society

The students of this programme will understand the significant role of business, management, marketing, finance, and human resources for an agriculture-based business environment. There will be an understanding of the basics of business ethics, research ethics, agriculture issues, and the principles of managerial practice.

Enterprising and Knowledgeable

The programme content will train learners and develop skills of agribusiness professionals. This will enhance employability in the field of agribusiness and marketing. The programme will enable students to get adopted in the area of Agribusiness as professionals (e.g., managers, agripreneurs, industry advisors, agribusiness policy makers, etc.). The emphasis is on student-centric learning where they solve the situational based problems of the sector and discuss the new innovative solutions.

Digital and Research Methodology-based skills

The students will be able to study and learn the effective use of digital tools to support academic writing, reference management and independent study using digital resources and learning materials. The understanding of the principles of business/management research methods will help the students to explore agribusiness relevant research areas and solve grassroots and industrial issues.

Course Structure

MBA (AGRIBUSINESS)

SEMESTER I						
Course Code	**Course Title**	**Type of Course**	**Hours**			**Credits**
			L	**T**	**P**	
MABM.401	Agricultural Marketing Management	Core	3	0	0	3
MABM.402	Agribusiness Environment and Policy	Core	3	0	0	3
MABM.403	Financial Management in Agribusiness	Core	3	0	0	3
MABM.404	Marketing and Strategic Management	Core	3	0	0	3
MABM.XXX	Individualised Education tutorial/plan	Non-credit	0	2	0	NC
MABM.595	Rural Immersion Module[1]	Skill Course	0	0	0	2
Students to opt for any one of the following discipline elective courses[2]						
MABM.405	Basics of Production & Supply Chain Management in Agribusiness	Discipline Elective	3	0	0	3
MABM.406	Human Resource Management in Agribusiness					
MABM.407	Managerial Economics					
MABM.408	Management of Contract Farming					
MABM.409	Commodity Markets and Futures Trading					
MABM.410	International Trade in Agriculture					
Total Credits			**15**	**2**	**0**	**17**

[1] As per the National Credit and Qualifications Framework (NCQF), 1 credit is equivalent to approximately 40 hours of total learning time.

[2] Students can opt for courses on NPTEL, SWAYAM if 70% of the syllabus matches the MOOC course syllabus

MBA (AGRIBUSINESS)

SEMESTER II						
Course Code	**Course Title**	**Type of Course**	**Hours**			**Credits**
			L	**T**	**P**	
MABM.411	Project Management and Entrepreneurship Development	Core	3	0	0	3
MABM.412	Business Research and Quantitative Techniques	Core	3	0	0	3
MABM.413	Principles of Management and Organizational Behavior	Core	3	0	0	3
MCST.501	Computer Applications	Compulsory Foundation	3	0	0	3
MABM.597	Summer Internship[3]	Skill Enhancement	0	0	0	9
MABM.XXX	Individualized Education tutorial/plan	Non-credit	0	2	0	NC
XXX.506-510	Multidisciplinary Courses	IDC	2	0	0	2
XXX.511-515	Value Added Course	Elective Foundation (Value Added)	2	0	0	2
Total Credits			**16**	**2**	**0**	**25**
ID/Multidisciplinary Courses to be offered by the Department						
MABM.506	Entrepreneurial Opportunities in Agriculture Sector	IDC	2	0	0	2

MBA (AGRIBUSINESS)

SEMESTER III						
Course Code	**Course Title**	**Type of Course**	**Hours**			**Credits**
			L	**T**	**P**	
MABM.599-1	Dissertation Part I (Dissertation/internship/ project)	Skill Based	0	0	0	20
Total Credits			**0**	**0**	**0**	**20**

MBA (AGRIBUSINESS)

SEMESTER IV						
Course Code	**Course Title**	**Type of Course**	**Hours**			**Credits**
			L	**T**	**P**	
MABM.599-2	Dissertation Part II (Dissertation/internship/ project)	Skill-Based	0	0	0	20
Total Credits			**0**	**0**	**0**	**20**

Total Credits = 17 + 25 + 20 + 20 = 82

L = Lecture; T = Tutorial; P = Practical

Note:

1. The Discipline Electives will be chosen by the student among those being offered by the Department in a particular Academic Session/Semester, depending upon the infrastructure and academic expertise of the faculty members available in the Department. The decision of the Department regarding Electives is to be final and binding to the concerned.
2. The Rural Immersion Module has to be carried out separately during the Winter Break (After completion of the First Semester)
3. Summer Internship has to be carried out separately during the Summer Break (After completion of the Second Semester)
4. MOOCs may be taken up to 40% of the total credits (excluding dissertation credits). MOOC may be taken in lieu of any course, but the content of that course should match a minimum of 70%. Mapping will be done by the department and students will be informed accordingly.
5. Students in every PG program must complete at least one course on the SWAYAM platform, accompanied by credit transfer. The students shall be responsible for the payment of fees for courses on SWAYAM.
6. Students are encouraged to take skill-based courses on the SWAYAMPLUS

platform.

Credit distribution

Curricular Components		Two-Year PG Programme Minimum Credits			
		Course Level	**Course work**	**Research thesis/project**	**Total Credits**
PG Diploma		400	42	--	42
1st Year (1st & 2nd Semester)		400 500	24 18	--	42
Students who exit at the end of 1st year shall be awarded a Postgraduate Diploma					
2nd Year (3rd & 4th Semester)	Coursework & Research	500	20	20	40
	Coursework (or)	500	40	--	40
	Research	--	--	40	40

Examination evaluation and pattern

Formative Evaluation: Internal assessment shall be 25 marks using any two or more of the given methods: tests, open book examinations, assignments, term paper, etc. The Mid-semester test shall be descriptive type of 25 marks including short answer and essay type. The number of questions and distribution of marks shall be decided by the teachers.

Summative Evaluation: The End semester examination (ESE) shall be 50 marks with upto 100% descriptive type and upto 30% objective type shall be conducted at the end of the semester. The objective type shall include a few words(very short) answers, fill-in the blanks, MCQs', and matching. Each answer shall carry weightage of upto two marks depending on the level of difficulty. The descriptive type shall include short answer and essay type questions. Each answer shall carry maximum weightage of ten marks in ESE. The teachers shall have the flexibility to decide on the number of questions and distribution of marks following above guidelines. Questions for exams and tests shall be designed to assess course learning outcomes along with focus on knowledge, understanding, application, analysis, synthesis, and evaluation.

The evaluation for IDC, VAC and entrepreneurship, innovation and skill development courses (<2 credits) shall include MST (50 marks) and ESE (50 marks). The pattern of examination for both MST and ESE shall be the same as given in Examination pattern. Evaluation of dissertation proposal and presentation in the third semester shall include 50% weightage by supervisor and 50% by HoD and senior-most faculty of the department. The evaluation of dissertation in the fourth semester shall include 50 marks for continuous evaluation by the supervisor for regularity in work, mid-term evaluation, report of dissertation, presentation, and final viva-voce; 50 marks (50% weightage) by an external expert shall be based on report of dissertation (25 marks), presentation (10 marks), novelty/originality (5 marks) and final viva-voce (10 marks). The external expert may attend the final viva-voce through offline or online mode.

Examination pattern

Core, Discipline Elective, and Compulsory Foundation Courses			IDC, VAC, Entrepreneurship, Innovation and Skill Development Courses (<2 credits) or any other theory course of <2 credits		
	Marks	Evaluation	Marks	Evaluation	
Internal Assessment	25	Various methods	-	-	
Mid-semester test (MST)	25	Descriptive	50	Descriptive (upto 100%) Objective (upto 30%)	
End-semester exam (ESE)	50	Descriptive (upto 100%) Objective (upto 30%)	50	Descriptive (upto 100%) Objective (upto 30%)	
Dissertation Proposal (Third Semester)			**Dissertation (Fourth Semester)**		
	Marks	Evaluation		Marks	Evaluation
Supervisor	50	Dissertation proposal and presentation	Supervisor/ co supervisor(s)	50	Continuous assessment (regularity in work, mid-term evaluation) dissertation report, presentation, final vivavoce
HoD and senior most faculty of	50	Dissertation proposal and presentation	External expert	50	Report of dissertation (25), presentation

the department					(10), novelty/originality (5) and final viva-voce (10).

Marks for internship shall be given by the supervisor/internal mentor and the external mentor.

Rural Immersion Module (Skill-based)		
	Marks	**Evaluation**
Continuous Assessment	50	Reporting (10), Field Visits (40)
Presentation	20	Presentation skills (10), Response to queries (10)
Report	30	

Summer Internship (Skill-based)		
	Marks	**Evaluation**
Continuous Assessment	50	Internship Reporting (40), Certificate (10)
Presentation	20	Presentation skills (10), Response to queries (10)
Report	30	

Marks for internship shall be given by the supervisor, HoD and senior-most faculty of the department.

Some Guidelines for Internal Assessment

1. The components/pattern of internal assessment/evaluation should be made clear to students during the semester.
2. The results of the internal assessment must be shown to the students.
3. The question papers and answers of internal assessment should be discussed in the class.
4. The internal assessment shall be transparent and student-friendly and free from personal bias or influence.

Multiple Entry and Exit

Department	Entry Programme	Exit Programme	Any of the Prerequisites
Applied Agriculture	MBA Agribusiness	PG Diploma in Agribusiness	Industry/Internship Training-2 Months

SEMESTER- I

L	T	P	Cr
3	0	0	3

Course Code: MABM.401

Course Title: Agricultural Marketing Management

Total Hours - 45

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Assess agricultural marketing, pricing, packaging, and development of Agri products and services.

CLO2: Categories agro industry and gives the depth knowledge of making the decisions.

CLO3: Evaluate various alternatives at managerial roles in the industrial and corporate sector.

CLO4: Elaborate various methods of value addition and its importance for Agri commodities.

Unit/ Hours	Contents	Mapping with CLO
I 11 Hours	Nature and scope of Agricultural Marketing; Importance of Agricultural Marketing; Markets and Markets Structure in Agriculture; Different types of utility; Classification of markets; Marketing Functions; Packaging. **Learning Activities:** *Exercise on agricultural marketing system in Punjab and India, Peer discussion.*	**CLO1**
II 11 Hours	Transportation; Grading and Standardization; Storage; Processing and Value addition; Financing for Marketing; Buying and Selling; Market information; Market intelligence. **Learning Activities:** *Research article study on Agri market intelligence, Case study analysis and discussion.*	**CLO2**
III 11 Hours	Market functionaries; Regulated markets; Directorate of Marketing and Inspection; Warehousing; AgMark; FSSAI; Marketable and Marketed Surplus; Price Spread; Agricultural Marketing Channels. **Learning Activities:** *Research article review, Group discussion.*	**CLO3**

IV **12 Hours**	Market integration; Commodity Futures Trading; Hedging and Speculation; Agricultural Price Policy; Minimum Support Price; Market Intervention Scheme; eNAM; Role of ICT in Agricultural Marketing; Contract Farming. **Learning Activities:** *Student presentations and Group discussion.*	**CLO4**

Suggested Readings:

1. Acharya, S. S. and Agarwal, N. L., 2020, Agricultural Marketing in India. 7th Ed. Oxford and IBH.
2. Kohls, R. L. and Uhj, J. N., 2005, Marketing of Agricultural Products. 9th Ed. Prentice Hall.
3. Kotler, P., 2002, Marketing Management - Analysis, Planning, Implementation and Control. Pearson Edu.
4. Krishnamacharyulu, C. and Ramakrishan, L., 2002, Rural Marketing. Pearson Edu.
5. Ramaswamy, V. S. and Nanakumari, S., 2002, Marketing Management. 2nd Ed. Mac Millan India.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.402
Course Title: Agribusiness Environment and Policy
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Recommend reforms to make various decisions and policies for agriculture.
CLO2: Illustrate the role of agriculture in the development of the nation.
CLO3: Identify significance of food and its policies.
CLO4: Develop sustainable policies regarding food and agriculture at the planning level.

Unit/ Hours	Contents	Mapping with CLO
I 11 Hours	Agri-business: Meaning and scope of agri-business; Changing dimension of agricultural business; Role of Agriculture Sector in Economic Development; PESTEL Analysis; Revolutions related to agriculture sector, Theory of minimalism. **Learning Activities:** *Case study, Group discussion, Classroom assignments.*	**CLO1 CLO2**
II 11 Hours	Food Management Policies in India: Food Security Act and Reforms in India; Food Corporation of India; Public Distribution System, Targeted Public Distribution System. **Learning Activities:** *Student presentations, Group discussion.*	**CLO2**
III 11 Hours	Agricultural Marketing Infrastructure; Contract Farming; Farmer Producer Organizations; Agricultural Finance; Agricultural Insurance; **Learning Activities:** *Classroom exercise, Case study, Group discussion.*	**CLO3**
IV 12 Hours	Policy initiatives in the Agricultural Input Sector, Food Processing Sector; Climate change and its impacts on agricultural sector; Policy initiatives in organic farming and sustainable agricultural production. **Learning Activities:** *Exercise on impact study, Student presentations.*	**CLO4**

Suggested readings:

1. Deshpande, R.S. and Arora, S., 2010, Agrarian crisis and farmer suicides. Sage publications, Delhi.

2. Gupta, K. B., Siddiqui, F. and Alam, I., 2014, Rural Management, CBS Publishers and Distributors Pvt. Ltd., Delhi.
3. Konig, G., Da Silva, C. A. and Mhlanga, N., 2013, Enabling environments for agribusiness and agro-industries development: Regional and country perspectives, FAO, Roma (Italia).
4. Palanithurai, G. and Ramesh, R., 2011, Globalisation and rural development. Concept publishing company, Delhi.
5. Sabharwal, D., 2002, New Technology and Agrarian Change, Sanjay Publication, Delhi.
6. Singh, K., 2009, Rural Development: Principles, Politics and Management, Sage Publications India Pvt. Ltd., Delhi.
7. Stamoulis, K., & Zezza, A. (2003). A conceptual framework for national agricultural, rural development, and food security strategies and policies. Working Papers 03-17, Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations (FAO - ESA).
8. Clapp, J., Moseley, W. G., Burlingame, B., & Termine, P. (2022). The case for a six-dimensional food security framework. Food Policy, 106, 102164.
9. Government of India (2013). The National Food Security Act, 2013.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.403
Course Title: Financial Management in Agribusiness
Total Hours – 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: To compare and contrast various financial goals

CLO2: To gain insights on theories of capital structure.

CLO3: To examine the relevance of capital budgeting techniques

CLO4: To evaluate the significance of working capital management and dividend decisions in finance.

Unit/ Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Financial Management, Financial Goal: Profit Maximization vs. Wealth Maximization, Emerging Role of Financial Managers, Time Value of Money, Cost of Capital: Measurement of Cost of Capital: Cost of Specific Source of Finance and Weighted Average Cost of Capital, Capital Asset Pricing Model (CAPM) **Learning Activities:** *Peer discussion, Classroom assignments.*	**CLO1**
II 10 Hours	Capital Structure Theories: Net-Income, Net-Operating Income, Traditional and Modigliani-Miller Approach, Determinants of capital structure, Theories of Capitalization, Leverage: Financial, Operating and Combined Leverage, Analyses of Alternative Financial Plan (EBIT-EPS Analysis) **Learning Activities:** *Exercise on demand and supply forecasting, Research article reviews, Group discussion.*	**CLO2**
III 12 Hours	Capital Budgeting Decisions Objectives and Process of Capital Budgeting, Capital Rationing, Traditional and Discounted Cash Flow Techniques: Pay-Back Period, Accounting Rate of return, Net Present Value, Internal Rate of Return, Profitability Index **Learning Activities:** *Exercise on cost estimation, Case study, Group discussion.*	**CLO3**
IV 12 Hours	Working Capital - Concept and Classification, Computation of Working Capital Cycle and Estimation of Working Capital Requirement, Financing of working capital, Working Capital policies related to Inventory, Receivables and Cash Management. Dividend Decision and Valuation of firm, Factors Affecting Dividend Policies	**CLO4**

	Learning Activities: *Student presentations.*	

Suggested Readings:

1. Berk J., Harford J. & Marzo P.D., Fundamentals of Corporate Finance, Pearson Education, 2019 (3/e).
2. Titman S., Keown A.J. & Martin J.D., Financial Management: Principles and Applications, Pearson Education, 2019, (13/e).
3. Periasamy P. (2017). Financial, Cost and Management Accounting (7thEd.). Himalaya Publishing House.
4. Ramanathan S. (2014). Accounting for Management (4thEd.). Oxford University Press.
5. Shah P. (2015). Management Accounting (2ndEd.). Oxford University Press.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.404
Course Title: Marketing and Strategic Management
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Remember and explain core marketing concepts (STP, marketing mix, consumer behaviour).

CLO2: Apply marketing strategies (pricing, digital marketing, services) to real-world business scenarios.

CLO3: Analyze competitive forces using strategic tools.

CLO4: Evaluate business strategies (diversification, turnaround) using case studies.

CLO5: Design an integrated marketing/strategic plan for a new product/service.

Unit/ Hours	Contents	Mapping with CLO
I **10 Hours**	**Fundamentals of Marketing:** Core marketing concepts; Marketing orientation; Segmentation, targeting and positioning; Consumer behaviour and brand management. **Learning Activities:** *Quiz on definitions, Case study*	**CLO1**
II **12 Hours**	**Marketing Mix & Strategies:** Marketing mix decisions; Product life-cycle; Product mix; Pricing strategies; Services marketing; New product development; Channel management; Wholesaling and retailing; Marketing information system; Integrated marketing communications mix; International marketing; International Product Life Cycle. **Learning Activities:** *Pricing simulation game, Develop a marketing mix for a startup, Retail store visit report*	**CLO2**
III **10 Hours**	Digital & Strategic Marketing Trends: New trends in marketing practices- digital marketing, social media marketing, societal marketing, influencer marketing, omnichannel marketing. **Learning Activities:** *Create a social media campaign, Analyze an omnichannel brand (e.g., Amazon), Debate on ethical marketing.*	**CLO3**
IV **13 Hours**	Strategic Management: Strategic management concept and process; Types of corporate, business and functional strategies; Tools and techniques for strategic analysis- Ansoff matrix, BCG matrix, Porter's generic strategies; Environment scanning and industry analysis-PESTEL Analysis, SWOT analysis, Competitor analysis; Porter's five forces model; Strategy formulation- Generic strategies, Turnaround strategies, Diversification strategy; Strategy implementation and control.	**CLO4** **CLO5**

	Learning *Activities: Case study analysis, Group presentation on Porter's models, and developing a mini-strategy plan for a startup.*	

Suggested Readings:

1. Ghosh P. K. (2002). Industrial Marketing. Oxford University Press, New Delhi.
2. Kotler, P. & Keller, K. (2015) Marketing Management. *Pearson Publishers*, New Delhi.
3. Neelamegham, S., (1988). Marketing in India: Cases and Readings, Vikas, New Delhi.
4. Palmere, A., (2011). Principles of Service Marketing. Oxford University Press.
5. Ramaswamy, V. S. and Namakumari, S., (2002). Marketing Management, Planning and Control. Macmillan India Ltd., New Delhi.
6. Ramaswamy, V. S. & Namakumari, S. (2018). Marketing Management: Indian context global perspective. Sage Publication, New Delhi
7. Aggarwal, A., Majra, H., Gupta, P., Jacob, I., Jain, V., Krishna, G. R. & Goswami S. (2017). Marketing Management: Indian Cases. Pearson India Education Services Pvt. Ltd.
8. David, Fred R. and David, Forest R., 2017, Strategic management: Concepts and cases, Pearson Education, New Delhi.
9. Thompson Jr., A. A., Peteraf, M. and Gamble, J. E., 2015, Crafting and Executing Strategy. McGraw Hill, Irwin.
10. Gluek, W. F., 2005, Strategic management and Business Policy. New Delhi, Tata McGraw Hills
11. Kazmi, A., 2002, Business Policy and Strategic Management. Tata McGraw Hill, New Delhi.
12. Porter, M. E., 2008, Competitive strategy: Techniques for analyzing industries and competitors. Simon and Schuster.
13. Shrinivasan, R., 2012, Strategic Management: Indian Context. PHI
14. Stead, J. G. and Stead, E. W., 2014, Sustainable Strategic Management. Routledge Taylor & Francis Group.
15. Wheelen, T.L. and Hunger, J.D., 2003, Strategic Management and Business Policy. Pearson Education, (LPE), New Delhi.

Modes of transaction:

- Lectures & Interactive Sessions
- Case Studies & Group Projects
- Simulations & Role-Plays
- Guest Lectures (Industry Experts)
- E-Learning Modules

Tools used:

- MS Office (Word, Excel, PPT)
- Google Drive/Forms/Docs
- Case Studies
- Videos – TED Talks, Marketing campaign analyses

- E-learning – SWAYAM Plus & MOOCs

Journals/Publications

Course Code: MABM.XXX
Course Title: Individualized Education tutorial/plan
Total Hours - 30

L	T	P	Cr
0	2	0	NC

Course learning outcomes (CLO): Students will be able to

CLO1: learn the concept and educational measurement approaches and difficulties in learning process

CLO2: Describe their various assessment techniques and resources and recent technologies.

Units/ Hours	**Contents**	**Mapping with course Learning Outcome**
Unit I/ **30 Hours**	Concept and preparation of diverse needs, Educational approached and measures the diverse needs; Definition and characteristics of students with difficulties; environmental, cultural, and ecological difficulties. Functional assessment for development of compensatory skills, enrichment of academic skills; Types of various resources – exploring and utilizing the services, Role of technology for meeting diverse needs of learners; mobilizing appropriate sources.	**CLO1 & CLO2**

Course Code: MABM.595
Course Title: Rural Immersion Module
Total Weeks - 2

L	T	P	Cr
0	0	0	2

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Apply their classroom learning to real-time environment.

CLO2: Assess rural environment, rural markets and identify implementation gaps and business opportunities.

CLO3: Analyse the agricultural practices adopted by the farmers in the village.

CLO4: Determine the functioning of various organizations at the grass root level and how they are helping the village for improvement of their life.

Course Introduction:

The rural immersion module (2 weeks) has been designed to provide an opportunity for the students to observe the rural lifestyle closely and understand socio-economic situations from the point of view of the rural community. The students will have hands-on experience with farm management practices. During the first semester break (at the end of the first semester and the start of the second semester), students will have to go to the village/s and spend a fortnight with the farming community. It is expected that the students shall get exposure to various rural and agricultural practices adopted by the farmers in the village, Gram Panchayat, Cooperative Societies, NGOs, etc.; the expenditure incurred during the rural immersion module will be borne by the students themselves. The students will have to submit and present a report about their learning in the village/s.

Modes of transaction/Events: 14 days of activities

Day	Activity/Event
1	Meeting and interaction with village head (*Sarpanch/Mukhiya*)
2	Education facilities (School, College etc.) in the village
3	Interaction with Agriculture officials of Krishi Vigyan Kendra/Agricultural University/Agricultural Departments etc.
4	Meeting with progressive and young farmers in the village (A minimum of 5 farmers)
5	Meeting with small, marginal and women farmers (A minimum of 5 farmers)
6	Agri Input shops- Seeds, Pesticides, Fertilizers, Organic products, Irrigation equipments
7	Farm machinery used by the farmers in the village
8	Forest department/Agro-forestry
9	Livestock- Cow, Buffalo, Goat, Sheep, Poultry, Fishery etc.
10	Agricultural Marketing Places- APMC/Mandi
11	Agri-entrepreneurs- Motivational factors, cost- benefit analysis, marketing activities, etc.

12	Veterinary services in the village/Veterinary hospitals
13	Banks/Co-operative societies- Agricultural finance, types of loans, subsidy components, NABARD support, etc.
14	Food distribution in the village, Public Distribution System, Fair Price Shops/Ration Shops, Food retail outlets in the village
15	Collect certificate from village head

Tools used:

MS Office- Word, Excel, PPT, Google drive, Videos, Pictures, Google meet, Google forms/docs, WhatsApp.

Course Code: MABM.405
Course Title: Basics of Production & Supply Chain Management in Agribusiness
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):
After completion of the course, the students will be able to:
CLO1: Able to design layouts, plan production, and apply MRP techniques for efficient operations management.
CLO2: Able to develop operations strategies, optimize inventory, ensure quality, and implement lean and BPR practices.
CLO3: students will understand supply chain evolution, analyze agri supply chains, interpret SCM metrics, and evaluate advanced logistics solutions.
CLO4: students will manage warehousing, apply IT in SCM, plan procurement, and ensure ethical, transparent procurement processes.

Unit/Hours	Contents	Mapping with CLO
I 8 Hours	Overview of Production Planning and Control: Introduction, phases, functions, relationship with other departments; Types of Production Systems and Layouts: Types, concepts, applications, manufacturing methods; Process Selection and Facility Layout: Factors influencing layout, types of layout, layout design procedure; Aggregate Planning, Master Production Schedule, Material Requirement Planning (MRP): Concepts and applications. **Learning Activities:** Group discussion, case studies, simulation exercises, layout design tasks & planning charts	CLO1
II 19 Hours	Developing Operations Strategy: Elements and competitive priorities; Production Strategies and Service Strategies: Key differences and applications; Business Process Reengineering (BPR): Concepts and implementation; Benchmarking: Process and importance in operations management; Product Selection and Design: Approaches for product design, factors influencing design; Capacity Planning: Integrated production planning and control; Inventory Management: EOQ models, ABC analysis, discount policies; Quality Assurance: Statistical Process Control (SPC), TQM basics, ISO standards; Quality Management Tools: Pareto charts, Ishikawa charts, Fault tree analysis, Six Sigma; Lean Management: Principles and applications in operations. **Learning Activities:** Case studies, strategy formulation, BPR simulations, benchmarking exercises, product design tasks, inventory analysis, quality tools application, and lean implementation activities.	CLO2
III 09 Hours	Supply Chain Concepts: Meaning, evolution, traditional vs modern supply chains; Agri Supply Chain: Specific	

	challenges and strategies for agribusiness processes; SCM Metrics and Drivers: Key performance indicators in supply chain management; Logistics Elements: Third-party logistics (3PL), fourth-party logistics, fifth-party logistics concepts. **Learning Activities:** Case study, Group discussion, Student presentations	CLO3
IV 09 Hours	Warehousing Management: Distribution strategies and management techniques; IT Applications in SCM: AI, Machine Learning, IoT, Blockchain, GPS applications in supply chain processes; Procurement Planning: Bidding process, budgeting, evaluations, negotiation techniques; Procurement Audit & Ethics: Addressing fraud in procurement processes. **Learning Activities:** Conduct simulations on procurement, Case study, Group discussion, Student presentations	CLO4

Suggested Readings:

1. Adam, E. Everett, Ebert J. Ronald, 2003, Production and Operations Management concept, models, and behavior. Prentice Hall of India, New Delhi.
2. Aswathapa, K., 2005, Production & Operations Management. Himalaya Publishing House, New Delhi.
3. Buffa, E. S. and Sarin, R. K., 2010, Modern Production & operation Management. Wiley India Private Limited.
4. Chary S. N., 2000, Production & Operations Management. Tata McGraw hills, New Delhi.
5. Muhlemann, A., 2009, Production and Operations Management. Pearson Education, Delhi.
6. Acharya, S. S., and Agarwal, N. L., 2011, Agricultural marketing in India. Oxford and IBH.
7. Altekar, R. V., 2006, Supply Chain Management: Concepts and Cases. PHI.
8. Chopra, S., Meindl, P. and Kalra, D. V., 2016, Supply chain management: Strategy, Planning, and Operation,Pearson Education India.
9. Monczka, R., Trent, R. and Handfield, R., 2002, Purchasing and Supply Chain Management. Thomson Asia.
10. Van Weele, A. J., 2000, Purchasing and Supply Chain Management Analysis, Planning and Practice, Vikas Publ. House.
11. Nakano, M. (2019). Supply chain management: strategy and organization. Springer.
12. Pullman, M., & Wu, Z. (2021). Food supply chain management: building a sustainable future. Routledge.

Modes of transaction:

- Classroom lecture
- Problem solving practices

- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:
MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.406
Course Title: Human Resource Management in Agribusiness
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Assess effective management of people in an organization.

CLO2: Demonstrate different ways to maximize employee performance.

CLO3: Apply various recruitment & training activities in an organization.

CLO4: Analyzing the performance appraisal of employees in different conditions.

Unit/ Hours	Contents	Mapping with CLO
I **11 Hours**	Nature and Scope of HRM; Functions of HRM; Job Analysis; Job Design; Job Description; Job Evaluation. **Learning Activities:** *Exercise on job profiles, Peer discussion, Classroom assignments.*	**CLO1**
II **11 Hours**	Human Resource Planning; Recruitment; Selection; Orientation/Induction; Training and Development; Types of Training. **Learning Activities:** *Exercise on recruitment and selection process, Group discussion.*	**CLO3**
III **11 Hours**	Performance Appraisal; Performance Appraisal Process and Methods; Promotion; Demotion; Transfers; Absenteeism; Labour Turnover. **Learning Activities:** *Exercise on appraisal methods, Case study, Group discussion.*	**CLO2**
IV **12 Hours**	Wages and Salary Administration; Rewards and Incentives; Internal Mobility; Labour welfare and Social Security; Health and Safety; Labour Legislations; Quality of Work Life. **Learning Activities:** *Student presentations.*	**CLO4**

Suggested Readings:

1. Aswathappa, K. and Dash, S., 2010, International Human Resource Management, Text and Cases, Mc Graw Hill, New Delhi.
2. Dessler, G., 2007, Human Resource Management. Prentice Hall, India Pvt. Ltd., New Delhi.
3. Mondy, R.W., 2006, Human Resource Management. Pearson education, New Delhi.
4. Rao, V. S. P., 2009, Human Resource Management-Text and Cases. Excel Books, New Delhi.
5. Naik C. A. (2017). Human Resource Management: Managing People at Work (With Case Studies). Ane Books Pvt. Ltd.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.407
Course Title: Managerial Economics
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Understand and apply fundamental economic principles to real-world scenarios.

CLO2: Analyze production, cost structures, and pricing strategies under different market structures.

CLO3: Evaluate macroeconomic concepts and their impact on employment and policy-making.

Unit/ Hours	Contents	Mapping with CLO
I **12 Hours**	**Basic Economic Principles:** Introduction to Microeconomics, Macroeconomics and Managerial Economics; Definitions, Nature of managerial economics; Theory of consumer behaviour, and its applications- Demand analysis; Demand function; Demand elasticity; Demand forecasting and techniques. **Learning Activities:** *Problem-solving exercises.*	**CLO1**
II **13 Hours**	**Production, Costs, and Market Structures:** Objectives of firms; Production, cost and supply analysis; Pricing under different market structures- perfect and imperfect competition (monopoly, monopolistic, oligopoly); Pricing methods and strategies- product pricing and input pricing; **Learning Activities:** *Simulation of market structures, cost function calculations, and debates.*	**CLO2**
III **10 Hours**	**Macroeconomic Fundamentals:** Meaning, nature and scope, National income: Concepts, measurement, difficulties and importance; WPI (Wholesale Price Index), CPI (Consumer Price Index); Circular flow of income; Consumption, investment and saving. **Learning Activities:** *Problem-solving exercises.*	**CLO1** **CLO2**
IV **10 Hours**	Money, Inflation, and Economic Growth: Functions of money; Demand and supply of money; Inflation: Causes, types, and effects; Economic growth and employment theories; Business cycles: Phases and policy responses. **Learning Activities:** *Inflation impact analysis, monetary policy discussion.*	**CLO3**

Suggested Readings:

1. Barwell and Richard, 2016, Macroeconomic policy after the crash: Issues in monetary and fiscal policy, Palgrave Macmillan Publishers, New Delhi.
2. Chauhan, M. S., 2014, Micro Economics: A Brief Study. Global Publications, New Delhi.
3. D'Souza, E., 2009, Macroeconomics, Pearson Education, New Delhi.
4. Damodaran, S., 2007, Managerial Economics. Oxford: New Delhi.
5. Dwivedi, DN. 2015, Managerial Economics. 8th Edition, Vikash Publishing House, New Delhi.
6. Gupta G.S., 2014, Macroeconomics – Theory and Applications, Tata McGraw Hill, New Delhi.
7. Gupta S.B., 2009, Monetary Economics: Theory, Policy and Institutions, S. Chand, New Delhi.
8. Shapiro, E., 2013, Macroeconomic Analysis, Galgotia, New Delhi.
9. Vaish, M.C., 2010, Macroeconomic Theory, Vikas Publications, New Delhi.
10. Managerial Economics by PROF. TRUPTI MISHRA, Department of Management, IIT Bombay. https://nptel.ac.in/courses/110101149

Modes of transaction:

- Classroom lecture
- Problem-solving practices
- Group discussion
- Self-learning
- Games and Role Plays
- Case study discussion and analysis

Tools used:

- MS Office (Word, Excel, PPT)
- Google Drive/Forms/Docs
- Statistical tools for demand forecast
- Case Studies
- Videos
- E-learning – SWAYAM Plus & MOOCs
- Journals/Publications

Course Code: MABM.408
Course Title: Management of Contract Farming
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:
CLO1: Assess various agreements made between a buyer and farmers and their conditions to produce the agreed quantities.
CLO2: Introduce the regulations and formalities to be followed to make contracts.
CLO3: Manage a farm through contracts and get the work done through the contract farming.
CLO4: Apply management of project and analyzing the issues of farmers under the contracts.

Unit/ Hours	Contents	Mapping with CLO
I **10 Hours**	Concept and Logic of Contract Farming; Contract Farming – Past and Present; Advantages and Problems of Contract Farming - Advantages for farmers, Problems faced by farmers, Advantages for sponsors, Problems faced by sponsors. **Learning Activities:** *Peer discussion, Case study, Classroom assignments.*	**CLO1** **CLO2**
II **12 Hours**	Key Preconditions for Successful Contract Farming - Profitable market, Physical and Social Environments, Government support, Inventories of preconditions, Price fixation, Quality & Quantity Defaults; Conflict/dispute resolution **Learning Activities**: *Case study, Research article reviews, Group discussion.*	**CLO3**
III **12 Hours**	Types of Contract Farming - Centralized Model, Nucleus Estate Model, Multipartite Model, Informal Model, Intermediary Model; Contracts and their Specifications - Legal framework, Formula, Format, Specifications, Model contract farming act 2018 and New Amendments. **Learning Activities:** *Student presentations, Case study, Group discussion.*	**CLO1** **CLO2**

IV **11 Hours**	Managing the Project - Coordinating production, managing the agronomy, Farmer-management relations; Monitoring Performance - Monitoring quality and yields, monitoring human resources, Protecting the environment. **Learning Activities:** *Student presentations.*	**CLO4**

Suggested Readings:

1. Deshpande, C. S., 2005, Contract Farming as means of Value Added Agriculture, retrieved from https://www.nabard.org/pdf/OC%2042.pdf
2. FAO Agricultural Services Bulletin 145, 2017, Contract farming Partnerships for growth, retrieved from http://www.fao.org/docrep/014/y0937e/y0937e00.pdf
3. Rehber, E., 2007, Contract Farming: Theory and Practice, Icfai University Press
4. Singh, S., 2005, Contract Farming for Agricultural Development Review of Theory and Practice with Special Reference to India.
5. Singh, S., 2005, Political Economy of Contract Farming in India, Allied Pub. Pvt. Ltd.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.409
Course Title: Commodity Markets and Futures Trading
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Determine the commodity market, concepts and terms.
CLO2: Assess functioning of the commodity market and regulations to trade.
CLO3: Apply technological advancement in commodity trading.
CLO4: Introduced to various agencies and settlement of contracts.

Unit/ Hours	Contents	Mapping with CLO
I 10 Hours	Introduction to commodity derivatives and price risk management in agricultural markets; organizational setup of exchanges and specifications of futures contracts in world's leading commodity exchanges. **Learning Activities:** *Exercise on profiling of the companies, Peer discussion.*	**CLO1**
II 12 Hours	Mechanics of futures trading; hedging price risk using futures contracts; option transaction and forward transaction – concept and mechanism, price discovery mechanism and market. **Learning Activities:** *Case study analysis and discussion.*	**CLO2**
III 12 Hours	Clearing house and margin system; clearing, settlement and delivery of contracts; Market surveillance and risk control; trading in warehouse receipts (WRs): WRs and collateralized commodity financing. **Learning Activities:** *Exercise on warehousing system in India, Group discussion.*	**CLO3**
IV 11 Hours	Regulation of futures and trading practices in leading national and regional exchanges in India. **Learning Activities:** *Student presentations and Group discussion.*	**CLO4**

Suggested Readings:

1. Hull, John C. 2017. Fundamentals of futures and options markets, Boston, Pearson publication.

2. Ram, P. V. and Bala, S. D., 2016, Strategic Financial Management. Snow White Publ.
3. Bomin, C. A., 1990, Agricultural Options: Trading, Risk Management and Hedging. Wiley Publ.
4. Gupta, S.L., 2005, Financial Derivatives. PHI.
5. Sridhar, A. N., 2008, Future and Options. Shroff Publishers and Distributors Pvt. Ltd.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.410
Course Title: International Trade in Agriculture
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):
After completion of the course, the students will be able to:
CLO1: Interpret international trade concepts, policies to assist them in decision making and framing strategies in their managerial roles.
CLO2: Assess functions of various agencies in international trade and their challenges which can be useful in decision making in any organization.
CLO3: Determine the demand, supply, opportunity and various cost factors of the foreign markets.
CLO4: Discuss different methods to enter the international markets based on the nature of operations.

Unit/Hours	Contents	Mapping with CLO
I 10 Hours	International trade – basic concepts, Importance of foreign trade for developing economy; absolute and comparative advantage, foreign trade of India. WTO and its implications for Indian economy in general and agriculture sector in particular. Competitive environmental forces in global Business-Political, Economic, regional economic integration, cultural and human factors **Learning Activities**: Peer discussion, Case study.	CLO1
II 14 Hours	TRIPS, TRIMS quotas, anti-dumping duties, quantitative and qualitative restrictions, tariff and non-tariff measures, trade liberalization, subsidies, green and red boxes, issues for negotiations in future in WTO; Countervailing Duty Measures and carbon trade, SPS Agreement. Regional economic groupings. **Learning Activities:** Peer discussion, Student Presentations, Case study	CLO2
III 08 Hours	Composition of India's foreign trade policy; India's balance of payments; exchange rate; export promotion institutions with special emphasis on EPCs and commodity boards, MPEDA, APEDA and service institutes, export procedures, Role of ECGC in insurance, **Learning Activities:** Case study, Research article reviews, Group discussion	CLO3
IV 10 Hours	Backward linkages towards promotion of food quality and exports in India, Issues and challenges encountered by exporters of agri- food products in meeting buyers requirement in different markets, International marketing - market entry methods. **Learning Activities:** Peer discussion, Case study, Research article reviews, Group discussion.	CLO4

Suggested Readings:

1. Anant, K., Sundaram and Stewart, B. J., 2010, The International Business: Text and cases, PHI.
2. Bhalla V. K., 1993, International Economy- Liberalisation Process. Anmol, New Delhi.
3. Cherunilam, F., 2010, International Business- Text and Cases. PHI.
4. Economic Survey of India (various issues), Ministry of Finance, GOI.
5. Eiteman, D. K. and Stopnehill, A. L., 1986, Multinational Business Finance. Addition Wesley, New York.
6. Paul, J.,2013, International Business. PHI.
7. Subba Rao, P., 2008, International Business Text andCases.HPH.
8. Woods, M., 2001, International Business. Palgrave. 9. Matthews, A. (2014). Food security and WTO domestic support disciplines post-Bali. Geneva: International Centre for Trade and Sustainable Development.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:
MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Semester –II

Course Code: MABM.411
Course Title: Project Management and Entrepreneurship Development
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:
CLO1: Understand the concepts, types, life cycle, feasibility analysis, and risk assessment involved in effective project management.
CLO2: Apply network analysis techniques and financial appraisal methods for effective project implementation and control.
CLO3: Formulate effective business plans, and explore the agricultural startup ecosystem in the context of national initiatives
CLO4: Gain basic understanding of entrepreneurship, startup support, financing, and policies for agripreneurs.

Unit/Hours	Contents	Mapping with CLO
I 12 Hours	Concept, Characteristics of project; Meaning of project management; Types of Projects; Project Life Cycle, Project Feasibility Analysis; Market feasibility, Technical feasibility, Financial feasibility, Economic feasibility; Social Cost-Benefit Analysis; Project Risk Analysis. **Learning Activities:** Exercise on feasibility analysis, Student assignments & presentations & Group discussion.	CLO1
II 14 Hours	Network Analysis: Critical Path Method (CPM) & Programme Evaluation and Review Technique (PERT), Financial appraisal/evaluation techniques – Discounted and Non-discounted Cash Flows; Net Present Value (NPV), Internal Rate of Returns; Benefit-Cost Ratio; Payback Period; Project Implementation; Project Control and Information System. **Learning Activities:** Exercise on network analysis & financial evaluation techniques, Student assignments & presentations & Group discussion.	CLO2
III 08 Hours	Business Plan Formulation: Importance, essential elements, and structure. Startup Ecosystem for Agriculture: Context of Startup India, Skill India, Make in India, RKVY-RAFTAAR initiatives, startup stages **Learning Activities:** Simulate business plan formulation and pitch presentations, integrating Skill India/Startup India frameworks for agricultural ventures.	CLO3
IV 10 Hours	Entrepreneurship: Concepts, significance, and examples; Sources of Financing: Loans, venture capital, angel investors, etc,; Government Policy Support to	

	Agripreneurs: Schemes and incentives available. **Learning Activities:** Student Groups shares their business idea with basic startup roadmap.	CLO4

Suggested readings:

1. Harold Kerzner, 2017, Project Management: A Systems Approach to Planning, Scheduling and Controlling, Wiley India Pvt. Ltd. New Delhi.
2. Mantel, Maerdith, Shafer, Sutton and Gopalan, M. R., 2016, Project Management: Core Textbook, Wiley India Pvt. Ltd. New Delhi.
3. Prasanna Chandra, 2019, Projects: Planning, Analysis, Selection, Financing, Implementation and Review. McGraw Hill Publishers, New Delhi.
4. Russ, J. M. and Dragan Z. M., 2016, Project Management Tool Box, Wiley India Pvt. Ltd. New Delhi.
5. Shilpi Jauhari, Chaturvedi, S. K., 2014, Project Management, Himalaya Publishing House, Mumbai.
6. Saravanavel, P. (2020): Entrepreneurial Development, Margham Publication, Chennai.
7. Srinivasan, N.P. & Gupta, C.B. (2017): Entrepreneurial Development, Sultan Chand & Sons
8. Barringer, Bruce R. (2008): Entrepreneurship: Successfully launching new ventures, Pearson Education, India.
9. Drucker, Peter F., and Peter Ferdinand Drucker (2007): Innovation and Entrepreneurship: Practice and Principles, Routledge.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.412
Course Title: Business Research and Quantitative Techniques
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Apply appropriate research designs, sampling techniques, and data collection methods to solve business research problems.

CLO2: Utilize statistical and optimization techniques for data-driven decision-making.

CLO3: Design and interpret multivariate models and simulation techniques for business applications.

Unit/ Hours	Contents	Mapping with CLO
I 12 Hours	**Fundamentals of Research:** Research process and types; Research Problem and Formulation of Research Hypotheses; Defining the Research problem; Research Problem: Problem identification process; Components of the research problem; Formulating the research hypothesis- Types of Research hypothesis. Research design; Data collection methods; Sampling techniques, Measurement scale; Questionnaire designing. **Learning Activities:** *Case studies on research design, sampling exercises, and questionnaire drafting.*	**CLO1**
II 11 Hours	**Statistical Analysis & Hypothesis Testing:** Descriptive statistics, Bivariate analysis, Correlation, ANOVA, Multivariate statistical analysis techniques, correlation and regression analysis, hypothesis testing, interval estimation, prediction in linear regression model; **Learning Activities:** *SPSS/R/Python hands-on exercises, hypothesis testing case studies.*	**CLO1 CLO2**
III 11 Hours	Advanced Multivariate Techniques & Optimization: Factor analysis, Cluster analysis, Logit and Probit models; Scaling techniques, Multidimensional scaling; Conjoint analysis. Linear programming problem formulation; Graphical Method and simplex method. **Learning Activities:** *Problem-solving exercises.*	**CLO2 CLO3**
IV 11 Hours	Decision Models & Business Research Ethics: Transportation and assignment problems; Inventory control models; Waiting line models; Decision making under risk and uncertainties; Game theory- two-person zero-sum game; Simulation; Decision trees; Pay off tables; Stochastic models, Neural networks, Markov process; Replacement Theory; Business and	**CLO2 CLO3**

	Research Ethics. **Learning Activities:** *Problem-solving exercises and group discussions.*	

Suggested Readings:

1. Anderson, 2009, Quantitative Methods in Business. Thomson Learning, Bombay.
2. Bhardwaj, R. S., 2000, Business Statistics. Excel Books.
3. Hooda. R. P., 2003, Statistics for Business and Economics, McMillan India Ltd.
4. Kothari C.R., 2007, Quantitative Techniques. Vikas Publishing House, New Delhi.
5. Levin, R.I. and Rubin, D.S., 2008, Statistics for Business. Prentice Hall of India, New Delhi.
6. Kumar Ranjit. 2014. Research Methodology- A Step-by-Step Guide for Beginners (4th ed.), SAGE Publications.
7. Saunders M., Lewis P., and Thornhill,2007. A. Research Methods for Business Students (4th ed.), Prentice Hall of India.
8. Hillier, L., 2005, Operations Research: Concepts & Cases. Tata McGraw Hill, New Delhi.
9. Kothari, C. R., 1994, An Introduction to Operations Research. Vikas Publishing House, New Delhi.
10. Shenoy, G.V., 2009, Operations Research for Management. New Age Publishers: New Delhi.
11. Taha, H. A., 2006, Operations Research- an Introduction. Prentice Hall of India, New Delhi.
12. Vohra, N.D., 2009, Quantitative Techniques in Management. Tata McGraw Hill, New Delhi.

Modes of transaction:

- Lectures & case discussions
- Software-based labs (SPSS/R/Python/Excel)
- Group projects (marketing research report)
- Simulations & role-playing (game theory, conjoint analysis)

Tools used:

- Statistical Software: **SPSS/R/Python**
- Optimization Tools: **Excel Solver**
- Simulation: **Monte Carlo in Excel**
- Survey Tools: **Google Forms and others**

Course Code: MABM.413
Course Title: Principles of Management and Organizational Behaviour
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Interpret management level activities in an organised manner such as planning, directing, controlling the human and other resources in an organization.

CLO2: Assess the behavior of employees, their needs and rewards.

CLO3: Support and accomplishing the goals of both the employees & organization.

CLO4: Adapt Knowledge management and the ways to serve society under CSR.

Unit/ Hours	Contents	Mapping with CLO
I 11 Hours	Management – Nature, Scope, Significance and Functions; Management Theories; Management By Objectives (MBO); Planning; Organizing; Directing; Staffing; Controlling; Reviewing; Budgeting. **Learning Activities:** *Role play, Case study, Group activities.*	**CLO1**
II 11 Hours	Types of Organization; Motivation; Decision Making; Organizational Communication; Corporate Social Responsibility (CSR); Centralisation and Decentralization. **Learning Activities:** *Discussion upon CSR initiatives adopted by different organisations, Case study.*	**CLO1 CLO4**
III 11 Hours	Introduction to Organizational behaviour; Individual Behaviour; Personality; Perception; Values; Attitude; Emotions; Groups; Teams. **Learning Activities:** *Exercise on team building, Case study, Group discussions.*	**CLO2**
IV 12 Hours	Globalization; Diversity; Ethics; Organizational Culture; Managing Conflict; Negotiation skills; Stress Management; Power and Politics. **Learning Activities:** *Student presentations, Group discussions.*	**CLO3**

Suggested Readings:

1. Cherunilam, F., 1993, Organisational Behaviour, Himalaya Publishing House, New Delhi.
2. Greenberg, J., 2013, Behavior in Organisations, PHI Learning Private Limited, New Delhi.
3. Harold, K. and Weirich, H.,2005, Management – A Global Perspective, McGraw Hill Education, 11th edition.

4. John A. Wagner III, J. A. andHollenbeck, J. R., 2015, Organizational Behaviour, Routledge Taylor & Francis Group, New York.
5. Kolb, D., 1991, Organizational Behaviour: Practical Readings for Management, 5th Englewood Cliffs, New Jersey, PHI.
6. Luthans, F., 2013, Organisational Behaviour, Prentice Hall of India, 12th Edition, New Delhi.
7. Mainiero, L. A. and Tromley C. L., 1985, Developing Management Skill in OB, New Delhi, PHI.
8. Meena Sharma, 2016, Principles of Management, First Edition, Himalaya Publishing House, New Delhi.
9. Neck, C. P., Houghton, J.D. and Murray E.L., 2017, Organizational behavior, Sage Publication India Private Limited.
10. Robbins, S.P. and Vohara, N.,2011, Organisational Behaviour, Pearson Education, New Delhi.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MCST.501
Course Title: Computer Applications
Total Hours - 45

L	T	P	Cr
3	0	0	3

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Use different operating system and their tools easily.

CLO2: Use word processing software, presentation software, spreadsheet software and latex.

CLO3: Understand networking and internet concepts.

CLO4: Use computers in every field like teaching, industry and research. Knowledge of E-commerce, digital marketing, and AI

Unit/ Hours	Contents	Mapping with CLO
I **11 Hours**	**Computer Fundamentals**: Introduction to Computer, Computer Architecture, Input/Output Devices, Memory (Primary & Secondary), Concept of Hardware and Software, Programming Languages (Low and High level), Compiler, Interpreter, Assembler. **Application Software**: Use of word processing software (MS Word) for creating reports and technical papers with the help of reference managers (Mendeley), Use of statistical packages (MS Excel) for analysis & visualization of data. **Learning Activities:** Analysis of various tools and Case Studies	**CLO1**
II **11 Hours**	**Information Technology:** Overview of IT concepts, Internet Basics, Definition and importance of cybersecurity, Introduction to cybersecurity threats and vulnerabilities, Identifying & Protecting potential cyber threats in food technology systems. **Learning Activities:** Assignment-based learning	**CLO2** **CLO3**
III **11 Hours**	**Data Processing:** Importance and applications of data processing in food technology, Overview of data types and sources in the food industry, Introduction to software tools for data processing and analysis. **Data Mining**: Techniques for data collection in food technology, Data organization, storage, and retrieval, Data cleaning and pre-processing. **Learning Activities:** Group discussion	**CLO2**

IV **11 Hours**	**E-Commerce**: Definition and scope of e-commerce, Evolution of e-commerce in the food industry, Benefits and challenges of e-commerce. **Digital Marketing**: Search engine optimization (SEO) for food products, Social media marketing, Email marketing and newsletters, Online advertising and promotion strategies. **Artificial Intelligence**: Introduction to AI, Need for AI, Introduction to Approaches of AI (Machine & Deep Learning) Applications of AI in Food Technology. **Learning Activities:** Case Studies	**CLO4**

Suggested Readings:

1. Sinha, P.K. Computer Fundamentals. BPB Publications.
2. Goel, A., Ray, S. K. 2012. Computers: Basics and Applications. Pearson Education India.
3. Computer Organization & Architecture –Designing & Performance, William Stallings, Prentice Hall of India.
4. Alfred Glkossbrenner- Internet 101 Computing MGH, 1996
5. Lucas. 2004. lnformation Technology for Managemenf. McGraw Hill.
6. Norton P. 1998. lntroduction to Computers. 2nd Ed. Tata McGraw Hill.
7. Rajaraman V. 2006. lntroduction to lnformation Technology. Prentice Hall of India.
8. Microsoft Office Professional 2013 Step by Step https://ptgmedia.pearsoncmg.com/images/9780735669413/samplepages/9780735669413.pdf

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

Course Code: MABM.597
Course Title: Summer Training

L	T	P	Cr
0	0	0	9

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Apply their classroom learning to a real-time environment.

CLO2: Develop critical thinking skills in agribusiness decision-making.

CLO3: Understand the application of technology and sustainability in agriculture

CLO4: Build communication and leadership skills by working in a professional setting & Strengthen their ability to analyze market trends and business opportunities.

Course Introduction:

The summer training program for MBA Agribusiness students is designed to provide hands-on experience in the agribusiness sector. The program bridges the gap between theoretical knowledge and real-world application, allowing students to immerse themselves in industry practices, managerial decision-making, and innovative strategies.

Objectives:

1. **Industry Exposure:** Familiarize students with the operational dynamics of agribusiness firms, cooperatives, and agricultural markets.
2. **Practical Learning:** Enhance analytical and managerial skills through experiential learning and live projects.
3. **Research & Innovation:** Equip students with problem-solving abilities related to agribusiness challenges.
4. **Networking:** Connect students with industry professionals for potential collaborations and career opportunities.

Tools used:

MS Office- Word, Excel, PPT, Google drive, Videos, Pictures, Google meet, Google forms/docs, WhatsApp.

Course Code: MABM.506
Course Title: Entrepreneurial Opportunities in Agriculture Sector
Total Hours - 30

L	T	P	Cr
2	0	0	2

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Explore the concept of Entrepreneurship in Agricultural Sector
CLO2: Analyse the use of Technology in Agricultural Entrepreneurship
CLO3: Promote skill development in the field of agri- entrepreneurship
CLO4: Prepare Young Entrepreneurs for self-employment
CLO5: Develop facilities for agri - production and sale & marketing of agri- products

Unit/ Hours	Contents	Mapping with CLO
I 8 Hours	Agricultural Commodities; Trends in Consumer Preference; Government Agencies and Private Organizations in the Agriculture, Food, and Natural Resources Industry; Agriculture's Impact on the Economy. **Learning Activities:** *Peer discussion, Student presentations.*	**CLO1**
II 7 Hours	Introduction to entrepreneur and entrepreneurship; Characteristics and functions of entrepreneurs; Classification of entrepreneurs; Entrepreneurial opportunities in Agriculture Sector. **Learning Activities:** Interaction with entrepreneurs, *Live projects.*	**CLO1 CLO2**
III 7 Hours	Women entrepreneurship; Role of entrepreneurship in economic development; Barriers to entrepreneurship; Forms of Business Ownership; Sources of innovative opportunities; Pre-feasibility study; Sources of finance; Business plan. **Learning Activities:** *Interaction with women entrepreneurs, Survey, exercise on business plans.*	**CLO2 CLO3**
IV 8 Hours	Government programmes for development of agri-entrepreneurship; Micro, Small and Medium Enterprises (MSME); Agri clinic and Agribusiness Centers Programme (ACABC); Startup India; MUDRA Yojana. **Learning Activities:** *Student presentations.*	**CLO4 CLO5**

Suggested Readings:

1. Dandekar, V. M. and Sharma, V. K., 2016, Agri-Business and Entrepreneurship Development. Manglam Publications, New Delhi.

2. Desai, V., 2006, Entrepreneurship Development, Project formulation, Appraisal & Financing for Small Industry. Himalaya Publications, New Delhi.
3. Hisrich, R. D. and Peters, M. P., 2002, Entrepreneurship, Tata McGraw Hill.
4. Kaplan, J. M. and Warren, A. C., 2013, Patterns of Entrepreneurship Management, John Wiley & Sons; 4th revised edition.
5. Nandan, H., 2007, Fundamentals of Entrepreneurship Management, Prentice Hall.

Modes of transaction:

- Classroom lecture
- Problem solving practices
- Group discussion
- Self-learning
- Peer learning
- Games and Role plays
- Lecture-cum-demonstration
- Brainstorming
- Case study discussion and analysis

Tools used:

MS Office- Word, Excel, PPT, Case Study, Google drive, Videos, Google meet, Google forms/docs, WhatsApp, e-content, e-learning open sources, Journals, Publications.

SEMESTER- III

Course Code: MABM.599-1
Course Title: Dissertation Part-1

L	T	P	Cr
0	0	0	20

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Demonstrate an in-depth knowledge of research pertaining to agribusiness management.

CLO2: Demonstrate experimental/theoretical research capabilities based on rigorous hands-on training.

CLO3: Critically analyze, interpret and present research findings to arrive at specific conclusions.

CLO4: Develop higher-order thinking skills required for pursuing higher studies (Ph.D.)/research-oriented career options.

Students shall carry out research work/dissertation in the III semesters under the supervisor/guide from the Department. Group dissertations may be opted for, with a group consisting of a maximum of four students. Dissertations can be taken up in collaboration with industry or in a group from within the discipline or across the discipline. Students will interact with the supervisors through meetings and presentations on a regular basis. After completion of the research work, students will complete the dissertation under the guidance of the supervisor. The dissertation will include a literature review, hypothesis, objectives, methodology, results, discussion, and bibliography. The dissertation will be evaluated by the Department as per the University policy.

SEMESTER- IV

Course Code: MABM.599-2

Course Title: Dissertation Part-II

L	T	P	Cr
0	0	0	20

Course Learning Outcomes (CLO):

After completion of the course, the students will be able to:

CLO1: Demonstrate an in-depth knowledge of scientific research pertaining to agribusiness management.

CLO2: Demonstrate experimental/theoretical research capabilities based on rigorous hands-on training.

CLO3: Critically analyze, interpret and present the data in light of existing scientific knowledge to arrive at specific conclusions.

CLO4: Develop higher-order thinking skills required for pursuing higher studies (Ph.D.)/research-oriented career options.

Students shall carry out research work/dissertation in the IV semesters under the supervisor/guide from the Department. Group dissertations may be opted for, with a group consisting of a maximum of four students. Dissertations can be taken up in collaboration with industry or in a group from within the discipline or across the discipline. Students will interact with the supervisors through meetings and presentations on a regular basis. After completion of the research work, students will complete the dissertation under the guidance of the supervisor. The dissertation will include a literature review, hypothesis, objectives, methodology, results, discussion, and bibliography. The Department will evaluate the dissertation as per the University policy.