SEMESTER-IV

GANPAT UNIVERSITY									
FACULTY OF MANAGEMENT STUDIES									
Program	MBA		Branch/Spec.		MBA (Agribusiness) Elective Subject				
Semester	IV				Version	1.0.0.0			
Effective from Academic Year		2025-26			Effective for the batch Admitted in		June 2025		
Subject code	**IVA02ATS**		Subject Name		**Agri-Tech Start-ups, Innovation Models and Precision Farming**				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	2	0	0		2	Theory	100		100
Hours	2	0	0		30	Practical			

Objective:
To equip Agribusiness students with a strategic framework to identify, evaluate, and lead innovative Agri-Tech ventures, with a focus on business model design, precision farming applications, and navigating the entrepreneurial ecosystem.

Course Outcome:
CO 1: The students will be able to explain the strategic drivers of the Agri-Tech revolution and formulate a viable startup concept using lean innovation principles.
CO 2: The students will be able to analyze various Agri-Tech business models and design a compelling value proposition and go-to-market strategy for a new venture.
CO 3: The students will be able to evaluate the business applications and ROI of key precision farming technologies for enhancing farm productivity and sustainability.
CO 4: The students will be able to formulate a strategic plan for funding, scaling, and managing an Agri-Tech venture, considering the ecosystem and future industry trends.

Theory syllabus

Unit	Content	Hrs
1	Foundations of Agri-Tech Entrepreneurship, The Agri-Tech Revolution: Solving Global Food Challenges, The Lean Startup Methodology for Agriculture, Business Model Canvas & Value Proposition Design, The Agri-Tech Ecosystem: Startups, VCs, Corporates, Introduction to Precision Farming: The Value Proposition, Identifying Market Gaps & Unmet Farmer Needs	6
2	Agri-Tech Business Models and Go-to-Market Strategy, Agri-Tech Verticals: Farm Management, Marketplaces, Fintech, Business Models: SaaS, Data-as-a-Service, Outcome-based, Hardware & Robotics Models: Capex vs. Leasing, Go-to-Market Strategy: Direct to Farmer vs. Channel Partners, Pricing Strategies for Agri-Tech Products & Services, Competitive Landscape Analysis: Competing with Incumbents, Building a Brand in the Agricultural Sector.	8
3	Precision Farming: Technologies and Business Impact, Precision Farming Tech Stack (Manager's View): - Drones & Aerial Imagery for Crop Scouting - IoT & On-Farm Sensors for Real-time Data - GPS, Guidance & Variable Rate Technology (VRT), Farm Management Information Systems (FMIS) Platforms, Calculating the ROI of Precision Farming Investments, Overcoming Farmer Adoption	8

	Barriers: Usability & Trust, Data Ownership & Monetization Strategies.	
4	Funding, Scaling, and the Future of Agri-Tech, The Agri-Tech Funding Ecosystem: Angels, VCs, Impact Investors, Crafting the Investor Pitch Deck & Storytelling, Building Strategic Partnerships with Corporates & Academia, Scaling the Venture: Challenges of Growth in Agriculture, Intellectual Property (IP) Strategy for Agri-Tech, Ethical & Sustainability Considerations in Agri-Tech, Future Trends: AI, Automation, Carbon Farming, Vertical Farming, Capstone: Developing a Business Plan for an Agri-Tech Venture	8
Practical content		
Reference Books		
1.	Ries, Eric. The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Currency, 2011.	
2.	Thiel, Peter, and Masters, Blake. Zero to One: Notes on Startups, or How to Build the Future. Currency, 2014.	
3.	Osterwalder, Alexander, and Pigneur, Yves. Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley, 2010.	
4.	Moore, Geoffrey A. Crossing the Chasm: Marketing and Selling Disruptive Products to Mainstream Customers. 3rd Edition, Harper-Collins, 2014.	
5.	Christensen, Clayton M. The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. Harvard Business Review Press, 2016.	
6.	Kawasaki, Guy. The Art of the Start 2.0: The Time-Tested, Battle-Hardened Guide for Anyone Starting Anything. Portfolio, 2015.	
7.	Feld, Brad, and Mendelson, Jason. Venture Deals: Be Smarter Than Your Lawyer and Venture Capitalist. 4th Edition, Wiley, 2019.	
8.	Godin, Seth. This Is Marketing: You Can't Be Seen Until You Learn to See. Portfolio, 2018.	
9.	Dawson, Jennifer. The Business of Food: A Practical Guide to Starting and Growing a Food Business. Routledge, 2021.	
10.	Sinek, Simon. Start with Why: How Great Leaders Inspire Everyone to Take Action. Portfolio, 2009.	