



**VIT**<sup>®</sup>

**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

# **VIT SCHOOL OF AGRICULTURAL INNOVATIONS AND ADVANCED LEARNING**

## **Curriculum and Syllabus**

*(As per ICAR 5<sup>th</sup> Deans' Committee Report)*

### **B.Sc. (Hons.) Agriculture Programme**

*VIT – A place to learn, A chance to grow*



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(VAIAL)**

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## **VISION STATEMENT OF VELLORE INSTITUTE OF TECHNOLOGY**

Transforming life through excellence in education and research.

## **MISSION STATEMENT OF VELLORE INSTITUTE OF TECHNOLOGY**

**World class Education:** Excellence in education, grounded in ethics and critical thinking, for improvement of life.

**Cutting edge Research:** An innovation ecosystem to extend knowledge and solve critical problems.

**Impactful People:** Happy, accountable, caring and effective workforce and students.

**Rewarding Co-creations:** Active collaboration with national & international industries & universities for productivity and economic development.

**Service to Society:** Service to the region and world through knowledge and compassion.

## **VISION STATEMENT OF THE SCHOOL OF AGRICULTURAL INNOVATIONS AND ADVANCED LEARNING**

To be a forerunner in developing and demonstrating sustainable smart agriculture to combat the global challenges of next-generation farming.

## **MISSION STATEMENT OF THE SCHOOL OF AGRICULTURAL INNOVATIONS AND ADVANCED LEARNING**

1. To offer world class learning and training experience to the students in science, technology and business aspects of agriculture.
2. To serve the farming community with custom-designed technologies for improved agricultural production and enhanced productivity.
3. To innovate globally competent novel technologies for uplifting the agro-industry.



## **B.Sc. (Hons.) Agriculture**

### **CREDIT STRUCTURE**

#### **Category-wise Credit distribution**

<b>BREAK-UP OF COURSES</b>		
<b>Sl.No.</b>	<b>Category</b>	<b>Credits</b>
1	Programme Core	171
2	Programme Elective	9
<b>Recommended Total Number of Credits (as per the inclusion of Remedial Course Credits)</b>		<b>181/183/184 (PCMB/PCB and PCM/Agri)</b>
Minimum Total Number of Credits		<b>180</b>



## B.Sc. (Hons.) Agriculture

### DETAILED CURRICULUM

**Programme Core (Credits to be earned: 171)**

Course Code	Course Title	Course Type	L	T	P	C	Prerequisite
<b>Bridge Courses (<u>Gradial</u>)</b>							
BAG1000	Introductory Biology	Embedded T & L	1	0	2	2	None
MAT1000	Elementary Mathematics	Theory	2	0	0	2	None
BAG1001	Agricultural Heritage	Theory	1	0	0	1	None
<b>Programme Core</b>							
ENG1010	Comprehension and Communication Skills in English	Embedded T & L	1	0	2	2	None
BAG1028	Human values and Ethics ( <b><u>Non-Gradial</u></b> )	Theory	1	0	0	1	None
EXC1188 /EXC1189 /EXC1190	NSS/NCC/Physical Education & Yoga Practices/Co-Extra Curricular Basket - ( <b><u>Non-Gradial</u></b> )	Lab	0	0	0	2	None
MAT1010	Statistical Methods	Embedded T & L	1	0	2	2	None
MGT1053	Entrepreneurship Development , Business Communication and IPR	Embedded T & L	1	0	2	2	None
LFS1101	Introduction to Aptitude and General Awareness	Theory	0	0	0	3	None
BAG1004	Principles of Food Science and Nutrition, Food Safety and	Embedded T & L	2	0	2	3	None



	Standards						
BAG1006	Protected Cultivation and Secondary Agriculture	Embedded T & L	1	0	2	<b>2</b>	None
BAG1007	Renewable Energy and Green Technology	Embedded T & L	1	0	2	<b>2</b>	None
BAG1008	Principles of Organic Farming	Embedded T & L	1	0	2	<b>2</b>	None
BAG1009	Fundamentals of Plant Biochemistry and Biotechnology	Embedded T & L	2	0	2	<b>3</b>	None
BAG1010	Introduction to Forestry	Embedded T & L	1	0	2	<b>2</b>	None
BAG1011	Agricultural Microbiology	Embedded T & L	1	0	2	<b>2</b>	None
BAG1012	Fundamentals of Crop Physiology	Embedded T & L	1	0	2	<b>2</b>	None
BAG1013	Fundamentals of Agronomy	Embedded T & L	3	0	2	<b>4</b>	None
BAG1014	Fundamentals of Genetics	Embedded T & L	2	0	2	<b>3</b>	None
BAG1015	Fundamentals of Plant Breeding	Embedded T & L	2	0	2	<b>3</b>	None
BAG1016	Principles of Seed Technology	Embedded T & L	1	0	4	<b>3</b>	None
BAG1017	Fundamentals of Agricultural Economics	Theory	2	0	0	<b>2</b>	None
BAG1018	Farm Machinery and Power	Embedded T & L	1	0	2	<b>2</b>	None
BAG1019	Fundamentals of Plant Pathology	Embedded T & L	3	0	2	<b>4</b>	None
BAG1020	Fundamentals of Soil Science	Embedded T & L	2	0	2	<b>3</b>	None
BAG1021	Fundamentals of Entomology	Embedded T & L	3	0	2	<b>4</b>	None
BAG1022	Fundamentals of Horticulture	Embedded T & L	1	0	2	<b>2</b>	None



BAG1023	Fundamentals of Agricultural Extension Education	Embedded T & L	2	0	2	<b>3</b>	None
BAG1024	Introductory Agro-Meteorology and Climate Change	Embedded T & L	1	0	2	<b>2</b>	None
BAG1025	Educational Tour ( <b>Non-Gradial</b> )	Project	0	0	0	<b>1</b>	None
BAG1026	Rural Sociology and Educational Psychology	Theory	2	0	0	<b>2</b>	None
BAG1027	Livestock and Poultry Management	Embedded T & L	3	0	2	<b>4</b>	None
BAG2001	Crop Production Technology – I (Kharif Crops)	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Agronomy
BAG2002	Crop Production Technology – II (Rabi Crops)	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Agronomy
BAG2003	Manures, Fertilizers and Soil Fertility Management	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Soil Science
BAG2004	Crop Improvement – I (Kharif Crops)	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Plant Breeding
BAG2005	Crop Improvement – II (Rabi Crops)	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Plant Breeding
BAG2006	Pests of Crops and Stored Grains and their Management	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Entomology
BAG2007	Diseases of Field and Horticultural Crops and their Management - I	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Plant Pathology
BAG2008	Diseases of Field and Horticultural Crops and their Management - II	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Plant Pathology
BAG2009	Soil and Water Conservation Engineering	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Soil Science
BAG2010	Agricultural Finance and Co-operation	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Agricultural



							Economics
BAG2017	Farming System & Sustainable Agriculture	Theory	1	0	0	<b>1</b>	Fundamentals of Agronomy
BAG2018	Problematic Soils and their Management	Theory	2	0	0	<b>2</b>	Fundamentals of Soil Science
BAG2019	Management of Beneficial Insects	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Entomology
BAG2020	Production Technology for Ornamental Crops, MAP and Landscaping	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Horticulture
BAG2021	Environmental Studies & Disaster Management	Embedded T & L	2	0	2	<b>3</b>	None
BAG2022	Post Harvest Management and Value Addition of Fruits and Vegetables	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Horticulture
BAG2023	Production Technology for Vegetables and Spices	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Horticulture
BAG2024	Production Technology for Fruit and Plantation Crops	Embedded T & L	1	0	2	<b>2</b>	Fundamentals of Horticulture
BAG3001	Principles of Integrated Pest and Disease Management	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Entomology & Fundamentals of Plant Pathology
BAG3002	Practical Crop Production – I (Kharif Crops)	Project	0	0	4	<b>2</b>	Crop Production Technology - I
BAG3003	Practical Crop Production – II (Rabi Crops)	Project	0	0	4	<b>2</b>	Crop Production Technology - II
BAG3004	Geo-informatics, Nanotechnology and Precision Farming	Embedded T & L	1	0	2	<b>2</b>	Farming System & Sustainable Agriculture
BAG3005	Rainfed Agriculture & Watershed Management	Embedded T & L	1	0	2	<b>2</b>	Farming System & Sustainable





							Agriculture
BAG3006	Agri-Informatics	Embedded T & L	1	0	2	<b>2</b>	None
BAG3007	Agricultural Marketing Trade and Prices	Embedded T & L	2	0	2	<b>3</b>	Agricultural Finance and Co-operation
BAG3008	Farm Management Production and Resource Economics	Embedded T & L	1	0	2	<b>2</b>	Agricultural Finance and Co-operation
BAG4003	Experiential Learning Programme: Module I	Project	0	0	0	<b>10</b>	RAWE&AIA
BAG4004	Experiential Learning Programme: Module II	Project	0	0	0	<b>10</b>	RAWE&AIA
BAG4099	Rural Agricultural Work Experience and Agro-industrial Attachment (RAWE&AIA)	Project	0	0	0	<b>20</b>	None

**Programme Electives (Credits to be earned: 9)**

Course Code	Course Title	Course Type	L	T	P	C	Prerequisite
BAG1002	Micro propagation Technologies	Embedded T & L	1	0	4	<b>3</b>	None
BAG1003	Landscaping	Embedded T & L	2	0	2	<b>3</b>	None
BAG1005	Agricultural Journalism	Embedded T & L	2	0	2	<b>3</b>	None
BAG2011	Agrochemicals	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Agronomy
BAG2012	Weed Management	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Agronomy
BAG2013	Protected Cultivation	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Horticulture



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BAG2014	Hi-tech. Horticulture	Embedded T & L	2	0	2	<b>3</b>	Fundamentals of Horticulture
BAG2015	Commercial Plant Breeding	Embedded T & L	1	0	4	<b>3</b>	Fundamentals of Plant Breeding
BAG2016	System Simulation and Agro-advisory	Embedded T & L	2	0	2	<b>3</b>	Introductory Agro-meteorology & Climate Change
BAG4001	Agribusiness Management	Embedded T & L	2	0	2	<b>3</b>	Agricultural Marketing Trade & Prices
BAG4002	Biopesticides and Biofertilizers	Embedded T & L	2	0	2	<b>3</b>	Principles of Integrated Pest and Disease Management