

SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution | Affiliated to Anna University, Chennai)

PULLOOR, KARIAPATTI- 626 115

DEPARTMENT OF AGRICULTURE ENGINEERING

MINUTES OF 5th BOARD OF STUDIES MEETING HELD ON 12.09.2020

Dr. V. Dharmaraj, welcomed the members and presented the following,

- Proposed curriculum & syllabus for B.E. Agriculture Engineering program under Regulations 2019
- The syllabus for the III and IV Semester courses under Regulation 2019
- Department Vision, Mission, PEO's and PO's

1. B.E. Agriculture Engineering Program

The members discussed the syllabus for B.E. Agriculture Engineering to be followed for the students admitted from 2019 - 20 academic year onwards under autonomous regulation 2019 and offered useful suggestions.

Based on the suggestions given by the members, the following resolutions are made,

- 1.1. It is resolved to introduce a laboratory exercise to work out the fertilizer requirement for different crops and measurement in the course 19UAG308 Agricultural Metrology and Crop Husbandry Laboratory in Semester III
- 1.2. It is resolved to add Principal Moment of Inertia in Unit III for the course 19UAG303 Fundamentals of Engineering Mechanics in Semester III
- 1.3. It is resolved to include Mechanism for controls like flywheel and governor in Unit IV for the course 19UAG304 Fundamentals of Theory of Machines in Semester III
- 1.4. It is resolved to rename 19UAG304 Fluid Mechanics and Hydraulics in Semester III as 19UAG304 Fluid Mechanics and Open Channel Hydraulics
- 1.5. It is resolved to rename 19UAG408 Surveying laboratory in Semester IV as 19UAG408 Surveying and Leveling laboratory
- 1.6. It is resolved to rename 19UAG912 Heat and Mass Transfer in Professional Electives as 19UAG912 Fundamentals of Heat and Mass Transfer

1.7. **It is resolved to introduce the following new core courses**

COURSE CODE	NAME OF THE COURSE
19UAG703	Introduction to Green Energy
19UAG709	Green Energy Laboratory
19UAG504	Irrigation and Drainage Laboratory
19UAG902	Manufacturing Technology
19UAG905	Watershed Planning and Management
19UAG908	Energy Auditing and Management
19UAG916	IoT Application in Agriculture Engineering
19UAG914	Design of Processing Equipment
19UAG971	Organic Farming Technology
19UAG972	Basics of Landscape Gardening
19UAG973	Farm Structures
19UAG607	Product Development Project
19UAG507	Creative Thinking and Innovation
19UAG861	Mushroom Cultivation Technology
19UAG864	AI in Agriculture
19UAG862	Vermi compost Technology
19UAG865	Seed Production Technology

1.8. **It is resolved to introduce the following One credit courses**

- i. 19UAG863 Organic Farming
- ii. 19UAG866 Entrepreneurship in Agriculture
- iii. 19UAG868 Seed Technology
- iv. 19UAG869 Design of Millets Processing Equipment

1.9 **It is resolved to introduce the following Mandatory courses**

- i. 19UGM322 Biology for Engineering Applications
- ii. 19UGM431 Gender Equality
- iii. 19UGM636 Indian Constitution and Essence of Indian Traditional Knowledge in Agriculture
- iv. 19UGM731 Professional Ethics and Human values

The members of Board of Studies also suggested that the following experiments may be added in the relevant laboratory courses and to include standard author books latest edition for each subjects.

The Board of Studies of Department of Agriculture Engineering recommends the III and IV Semester syllabus of B.E. Agriculture Engineering to be followed for the students admitted from 2019-20 academic year onwards under autonomous Regulations 2019 with the above modifications for approval in Academic Council.

Dr. V. Dharmaraj thanked the members for their contribution and suggestions in modification of the syllabus for B.E. Agriculture Engineering program under Autonomous Regulations.

Percentage of Revision in Syllabus

Details of Change in Syllabus					
S.No	Course Code	Course Name	Changes		Percentage of change
			Removed (if Any unitwise)	Added (if Any unitwise)	
1.	19UAG308	Agricultural Metrology and Crop Husbandry Laboratory	-	25%	25%
2.	19UAG304	Fundamentals of Theory of Machines	-	20%	20%
Total Percentage of change					Sum of % of Change = 45%
Percentage of revision in syllabus = Total Percentage of change /Total No of courses in which the syllabus revision is made					= 2 / 65 = 3.07%

Employability/ Entrepreneurship/ Skill Development

The BoS members reviewed and approved the courses with focus on Employability, Entrepreneurship/ Skill Development in R2019 Curriculum and syllabus as follows.

Courses with focus on Employability

Sl. No.	Course code	Course Name
1.	19UAG201	Introduction to Agricultural Engineering
2.	19UAG301	Unit Operations in Agricultural Processing
3.	19UAG303	Fundamentals of Theory of Machines
4.	19UAG304	Fluid Mechanics and Hydraulics
5.	19UAG305	Principles and Practices of crop Production
6.	19UAG306	Crop Husbandry Laboratory
7.	19UAG307	Fluid Mechanics Laboratory
8.	19UAG401	Tractor and Power Units
9.	19UAG402	Soil and Water Conservation Engineering
10.	19UAG403	Refrigeration and Air Conditioning for Agriculture Engineering
11.	19UAG404	Surveying and Leveling
12.	19 UIT427	Object Oriented Programming
13.	19UGS431	Reasoning and Quantitative Aptitude
14.	19UAG405	Surveying Laboratory
15.	19UAG507	Creative Thinking and Innovation

Courses with focus on Entrepreneurship

Sl. No.	Course code	Course Name
1.	19UAG401	Tractor and Power Units
2.	19UAG402	Soil and Water Conservation Engineering
3.	19UAG907	Design and Construction of Green House
4.	19UAG911	Agricultural Extension
5.	19UAG703	Introduction to Green Energy
6.	19UAG503	Micro Irrigation system
7.	19UAG508	Irrigation and Drainage Laboratory
8.	19UAG602	Design of Agricultural Machinery
9.	19UAG607	Product Development Project
10.	19UAG608	CAD for Agricultural Engineering
11.	19UAG702	Crop Process Engineering
12.	19UAG707	Summer Internship
13.	19UAG708	Agricultural Processing Laboratory
14.	19UAG607	Product Development Project

Courses with focus on skill development

Sl. No.	Course code	Course Name
1.	19UAG301	Unit Operations in Agricultural Processing
2.	19UAG303	Fundamentals of Theory of Machines
3.	19UIT427	Object Oriented Programming
4.	19UGS431	Reasoning and Quantitative Aptitude
5.	19UIT428	Object Oriented Programming Lab
6.	19UAG907	Design and Construction of Green House
7.	19UAG607	Product Development Project
8.	19UGS633	Interpersonal Skills Development Laboratory
10.	19UAG707	Summer Internship
11.	19UAG708	Agricultural Processing Laboratory
12.	19UAG607	Product Development Project
13.	19UAG801	Project Work



Chairperson
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