



# **SETHU INSTITUTE OF TECHNOLOGY**

**PULLOOR, KARIAPATTI – 626115**

**(An Autonomous Institution affiliated to Anna University, Chennai)**

## **CURRICULUM & SYLLABI**

**B.E AGRICULTURE ENGINEERING**

## **REGULATIONS 2015**

**(Applicable to candidates admitted in the Academic Year 2016 - 2017)**

**CHAIRPERSON  
BOARD OF STUDIES  
AGRICULTURE ENGINEERING  
SETHU INSTITUTE OF TECHNOLOGY  
KARIAPATTI - 626 115**

**CHAIRMAN  
ACADEMIC COUNCIL  
Sethu Institute of Technology  
Pulloor, Kariapatti - 625 115**

# SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

(An Autonomous Institution)

B.E. Degree Programme

**CURRICULUM & SYLLABI**

**Regulations 2015**

**Bachelor of Engineering in Agriculture Engineering**

## **OVERALL COURSE STRUCTURE**

Category	Total No. of Courses	Credits	Percentage
Humanities and Social Sciences (HS)	3	6	3
Basic Sciences (BS)	11	29	16
Engineering Sciences (ES)	6	15	9
Professional Core(PC)	32	89	51
Professional Electives (PE)	6	18	11
Open Electives (OE)	3	9	5
Project Work (PW)	2	8	5
<b>TOTAL</b>	<b>63</b>	<b>174</b>	<b>100</b>

## **COURSE CREDITS – SEMESTER WISE**

Branch	I	II	III	IV	V	VI	VII	VIII	TOTAL
<b>Agriculture Engineering</b>	22	22	24	25	23	23	21	14	174

**Employability Courses**

**Skill Development Courses**

**Entrepreneurship Development Courses**

**Any two or all of the above**

## SEMESTER I

[illegible]

## SEMESTER II

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	15UEN201	Business English and Presentation Skills (Common to ALL Branches)	3	0	0	3
2.	15UMA202	Engineering Mathematics – II (Common to ALL Branches)	3	2	0	4
3.	15UPH207	Physics for Agricultural Engineering	3	0	0	3
4.	15UAG204	Principles of Agricultural Engineering	3	0	0	3
5.	15UCY207	Environmental Science (Common to ALL Branches)	3	0	0	3
6.	15UEE208	Basic Electrical and Electronics Engineering (Common to ALL Branches)	3	0	0	3
<b>PRACTICAL</b>						
7.	15UAG206	Agricultural Engineering Practices Lab	0	0	3	2
8.	15UGS210	Basic Sciences Laboratory – II (Common to ALL Branches)	0	0	2	1
<b>TOTAL</b>			<b>18</b>	<b>2</b>	<b>5</b>	<b>22</b>
<b>TOTAL NO. OF CREDITS - 22</b>						

## SEMESTER III

[illegible]

## SEMESTER IV

[illegible]

## SEMESTER V

[illegible]

## SEMESTER VI

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	15UAG601	Solar and Wind Energy Engineering	3	0	0	3
2.	15UAG602	Hydrology and Water Resources Engineering	3	0	0	3
3.	15UAG603	Design of Agricultural Machinery	4	0	0	4
4.		Professional Elective – III	3	0	0	3
5.		Professional Elective – IV	3	0	0	3
6.		Open Elective – I	3	0	0	3
<b>PRACTICAL</b>						
7.	15UAG607	CAD for Agricultural Engineering	0	0	3	2
8.	15UAG608	Innovative and Creative Project	0	0	3	2
<b>TOTAL</b>			<b>19</b>	<b>0</b>	<b>6</b>	<b>23</b>
<b>TOTAL NO. OF CREDITS - 23</b>						

## SEMESTER VII

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1.	15UAG701	Bio-Energy Resource Technology	3	0	0	3
2.	15UAG702	Dairy and Food Engineering	3	0	0	3
3.	15UAG703	Farm Management and Finance	3	0	0	3
4.		Professional Elective – V	3	0	0	3
5.		Open Elective – II	3	0	0	3
<b>PRACTICAL</b>						
6.	15UAG706	Bio-Energy Laboratory	0	0	3	2
7.	15UAG707	Post Harvest and Food Process Engineering Laboratory	0	0	3	2
8.	15UGS531	Industrial Training (4 weeks)	0	0	0	2
<b>TOTAL</b>			<b>15</b>	<b>0</b>	<b>6</b>	<b>21</b>
<b>TOTAL NO. OF CREDITS -21</b>						

## SEMESTER VIII

[illegible]

## PROFESSIONAL ELECTIVES

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>AGRICULTURAL AND FOOD PROCESS ENGINEERING</b>						
1.	15UAG901	REFRIGERATION AND AIR-CONDITIONING FOR AGRICULTURE ENGINEERS	3	0	0	3
2.	15UAG902	STORAGE AND PACKAGING TECHNOLOGY	3	0	0	3
3.	15UAG903	SEED TECHNOLOGY APPLICATIONS	3	0	0	3
4.	15UAG909	FRUITS AND VEGETABLES PROCESSING	3	0	0	3
5.	15UAG915	DESIGN OF FOOD PROCESSING EQUIPMENT	3	0	0	3
<b>FARM MACHINERY AND POWER</b>						
6.	15UAG907	FARM POWER AND MACHINERY MANAGEMENT	3	0	0	3
7.	15UAG908	MECHANICS OF TILLAGE AND TRACTION	3	0	0	3
8.	15UAG916	MANUFACTURING PROCESSES	3	0	0	3
9.	15UAG917	TESTING AND MANAGEMENT OF FARM MACHINERY	3	0	0	3
<b>LAND AND WATER CONSERVATION ENGINEERING</b>						
10.	15UAG904	WATERSHED MANAGEMENT	3	0	0	3
11.	15UAG905	MICRO IRRIGATION	3	0	0	3
12.	15UAG906	ON FARM WATER MANAGEMENT	3	0	0	3
13.	15UAG918	DESIGN AND CONSTRUCTION OF GREEN HOUSE	3	0	0	3
14.	15UAG919	FARM STRUCTURES	3	0	0	3
15.	15UAG922	GROUND AND WELL WATER ENGINEERING	3	0	0	3
<b>BIOENERGY</b>						
16.	15UAG920	ENERGY AUDITING AND MANAGEMENT	3	0	0	3
17.	15UAG921	BIO AND THERMOCHEMICAL CONVERSION OF BIOMASS	3	0	0	3
<b>OTHERS</b>						
18.	15UAG910	SYSTEMS ANALYSIS AND SOFT COMPUTING IN AGRICULTURAL ENGINEERING	3	0	0	3
19.	15UAG911	AGRICULTURAL ECONOMICS AND FARM MANAGEMENT	3	0	0	3
20.	15UAG912	AGRICULTURAL EXTENSION	3	0	0	3
21.	15UAG913	IT IN AGRICULTURAL SYSTEMS	3	0	0	3
22.	15UAG914	SOIL SCIENCE AND ENGINEERING	3	0	0	3

### OPEN ELECTIVES

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15UAG971	PRINCIPLES OF AGRONOMY	3	0	0	3
2.	15UAG972	AGRIBUSINESS MANAGEMENT	3	0	0	3
3.	15UAG973	FUNDAMENTALS OF HORTICULTURE	3	0	0	3
4.	15UAG974	ORGANIC FARMING TECHNOLOGY	3	0	0	3
5.	15UAG975	SUTAINABLE AGRICULTURE AND FOOD SECURITY	3	0	0	3
6.	15UAG976	SEED PRODUCTION TECHNOLOGY	3	0	0	3
7.	15UAG977	SERICULTURE TECHNOLOGY	3	0	0	3
8.	15UAG978	BASICS OF LANDSCAPE GARDENING	3	0	0	3



## ONE CREDIT COURSES

SL.NO	COURSE CODE	COURSE TITLE	L	T	P	C
1.	15UAG861	INTRODUCTION TO RENEWABLE ENERGY	1	0	0	1
2.	15UAG862	MUSHROOM CULTIVATION	1	0	0	1
3.	15UAG863	VERMICOMPOST TECHNOLOGY	1	0	0	1
4.	15UAG864	GREEN HOUSE TECHNOLOGY	1	0	0	1
5.	15UAG865	WATER HARVESTING TECHNOLOGY	1	0	0	1
6.	15UAG866	ENTREPRENEURSHIP DEVELOPMENT AND MANAGEMENT	1	0	0	1
7.	15UAG867	ENERGY AUDIT AND MANAGEMENT	1	0	0	1
8.	15UAG868	FARM MACHINERY, MANAGEMENT AND COST ECONOMICS	1	0	0	1
9.	15UAG870	LIQUID BIOFUELS	1	0	0	1
10.	15UAG871	SOLAR PV SYSTEM	1	0	0	1