



**ASSAM UNIVERSITY: SILCHAR
TRIGUNA SEN SCHOOL OF TECHNOLOGY**

Table 1: Minimum credits to earn (for a degree under TSSOT)

Sl No	Degree	No of years	Min Credits
1	Bachelor of Technology	4	240
2	Bachelor of Technology (Lateral)	3	180
3	Master of Technology	2	120

Table 2: Types of courses (for a degree under TSSOT)

Sl. No	Category	Code	Remarks
1	Compulsory Foundation	CF	Leads to knowledge enhancement Mandatory for all discipline
2	Elective Foundation	EF	Value-based and are aimed at man-making education
3	Core	CC	Compulsory for all students
4	Discipline Centric Electives	DE	Supportive to the discipline of study
5	Open Electives	OE	Enabling an exposure to some other discipline/domain
6	Project, Seminar, Group Discussion, Grand Viva, summer training, industrial training etc.	PT	Enabling students to get the industry exposure and engineering applications in real life problems

Table 3: Class-hour (for a degree under TSSOT)

Sl. No	Type of Classes (Lesson)	Credit	Class-hour
1	Theory lecture	1	1
2	Practical/ Lab session/tutorial/assignment/ home work	1	2

Table 4: Evaluation Types and marks distribution (for a degree under TSSOT)

Sl. No	Type of examination	Marks (100%)	Min pass mark (30%)	Total Pass mark (50%)
1	Internal assessment	20	06	50
2	Mid-term evaluation	30	09	
3	End Semester evaluation	50	15	

Table 5: Grades and Grade-points (for a degree under TSSOT)

Letter Grade	Grade Point	Marks domain
O (Outstanding)	10	90-100
A (Excellent)	9	80-89
B (Good)	8	70-79
C (Average)	7	60-69
D (Pass)	6	50-59
F (Fail)	0	<50
Ab (Absent)	0	-

Table 6: SGPA and CGPA calculation (for a degree under TSSOT)

SGPA (Semester Grade Point Average)	CGPA (Cumulative Grade Point Average)
$SGPA = \frac{\sum C_i * G_i}{\sum C_i}$ <p>where C_i = no of credits of the ith course G_i = grade point earned by the student in the ith course</p>	$CGPA = \frac{\sum C_j * S_j}{\sum C_j}$ <p>where C_j = total no of credits of the jth semester S_j = SGPA of the jth semester</p>

Table 7: Course category vs Credit distribution for B.Tech degree under TSSOT

Sl. No	Category	Minimum Credit	Max credit	Total min
1	Compulsory Foundation	40	60	60
2	Elective Foundation	10	20	
3	Core	105	105	105
4	Discipline Centric Electives	20	25	35
5	Open Electives	10	15	
6	Minor Project, Seminar, Industrial training	15	15	40
7	Major Project, Seminar, Grand Viva	25	25	
Total (minimum)				240

Table 8: Course category vs Credit distribution for B.Tech (Lateral) degree under TSSOT

Sl. No	Category	Minimum Credit	Max credit	Total min
1	Core	105	105	105
2	Discipline Centric Electives	20	25	35
3	Open Electives	10	15	
4	Minor Project, Seminar, Industrial training	15	15	40
5	Major Project, Seminar, Grand Viva	25	25	
Total (minimum)				180

Table 9: Course category vs Credit distribution for M.Tech degree under TSSOT

Sl. No	Category	Minimum Credit	Max credit	Total min
1	Core	30	30	30
2	Foundation	10	20	40
3	Discipline Centric Electives	20	30	
4	Open Electives	5	15	
5	Project, Grand viva, Seminar	50 (in two semesters)	50	50
Total (minimum)				120

Table 10: Semester wise types of Courses B.Tech degree under TSSOT

Year	Semester	Min. Credits in a semester	Type of courses
Year I	Sem I	26	CF + EF
	Sem II	34	CF + EF
Year II	Sem III	35	CC + CF + EF
	Sem IV	35	CC + CF + EF
Year III	Sem V	35	CC + DE + OE + PT
	Sem VI	30	CC + DE + OE + PT
Year IV	Sem VII	25	CC + DE + OE + PT
	Sem VIII	20	CC + DE + OE + PT

Table 11: Semester wise types of Courses M.Tech degree under TSSOT

Year	Semester	Min. Credits in a semester	Type of courses	Remarks
Year I	Sem I	35	CF + CC + DE + OE	
	Sem II	35	CF + CC + DE + OE	
Year II	Sem III	25	PT	
	Sem IV	25	PT	

Table 12: Promotion Rules for different degrees under TSSOT

Sl No.	Promotion Rules
1	A student cannot be promoted to next semester without appearing the preceding semester examination.
2	To be promoted to 3 rd year a student has to clear all the courses of 1 st year.
3	To be promoted to 4 th year a student has to clear all the courses of 2 nd year.

Table 13: Compulsory Foundation Courses for B.Tech (4 years) under TSSOT

S. No.	Course Code	Course Title	Hrs/week L:T:P	Credits	Preferred semester
1	SOTCF 01	Engineering Mathematics	4:0:0	4	I
2	SOTCF 02	Engineering Physics	4:0:0	4	I
3	SOTCF 03	Environmental Science	3:0:0	3	I/II/III
4	SOTCF 04	Communication Skill in English	3:0:0	3	I/II
5	SOTCF 05	Engineering Chemistry	4:0:0	4	I/II
6	SOTCF 06	Advanced Engineering Mathematics	4:2:0	5	II
7	SOTCF 07	Engineering Mechanics	4:0:0	4	II
8	SOTCF 08	Computer Systems and Programming	4:2:0	5	II
9	SOTCF 09	Electrical Technology	4:0:0	4	I/II
10	SOTCF 10	Basic Electronics	4:0:0	4	II
11	SOTCF 11	Probability and Statistics	4:0:0	4	III/IV
12	SOTCF 12	Engineering Physics Lab	0:0:4	2	With SOT CF 02
13	SOTCF 13	Engineering Chemistry Lab	0:0:4	2	With SOT CF 05
14	SOTCF 14	Engineering Drawing	0:0:4	2	I/II
15	SOTCF 15	Computer Systems and Programming Lab	0:0:4	2	With SOT CF 08
16	SOTCF 16	Electrical & Electronics Lab	0:0:4	2	With SOT CF 09/10
17	SOTCF 17	Workshop Technology	0:0:4	2	I/II
18	SOTCF 18	Operation Research and Industrial Management	4:0:0	4	III/V

Table 14: Elective Foundation Courses for B.Tech (4 years) under TSSOT

S. No.	Course Code	Course Title	Hrs/week L:T:P	Credits	Preferred semester
1	SOTEF 01	Economics and Human Development	3:0:0	3	I/II
2	SOTEF 02	Values and Ethics	3:0:0	3	I/II
3	SOTEF 03	Communication skill in French	3:0:0	3	I/II
4	SOTEF 04	International politics and relations	3:0:0	3	I/II
5	SOTEF 05	Human rights and duties	3:0:0	3	I/II
6	SOTEF 06	NCC	0:0:4	2	I/II
7	SOTEF 07	NSS	0:0:4	2	I/II
8	SOTEF 08	Materials Science	4:0:0	4	III/IV
9	SOTEF 09	Law for Engineers	3:0:0	3	I/II

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Course Structure of B. Tech Programme under TSSOT
FIRST YEAR

Year	Semester	Min. Credits					To be earned to complete first year programme
		Semester	Offered for CF	Earned from CF	Offered for EF	Earned from EF	
I	Sem I	26	24	40	5	10	60
	Sem II	34	28		11		

First Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	SOT CF 01	Engineering Mathematics	4			4
2	SOT CF 02	Engineering Physics	4			4
3	SOTCF 03	Environmental Science	3			3
4	SOTCF 04	Communication Skill in English	3			3
5	SOTCF 05	Engineering Chemistry	4			4
6	SOTCF 12	Engineering Physics Lab			4	2
7	SOTCF 13	Engineering Chemistry Lab			4	2
8	SOTCF 14	Engineering Drawing			4	2
Total Credits (Compulsory Foundation)						24
9	SOT EF 01	Economics and Human Development	3			3
10	SOT EF 03	Communication skill in French	3			3
11	SOTEF 06	NCC			4	2
Total Credits (Elective Foundation)						8

Second Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	SOTCF 06	Advanced Engineering Mathematics	4	2		5
2	SOTCF 07	Engineering Mechanics	4			4
3	SOTCF 08	Computer Systems and Programming	4	2		5
4	SOTCF 09	Electrical Technology	4			4
5	SOTCF 10	Basic Electronics	4			4
6	SOTCF 15	Computer Systems and Programming Lab			4	2
7	SOTCF 16	Electrical & Electronics Lab			4	2
8	SOTCF 17	Workshop Technology			4	2
Total Credits (Compulsory Foundation)						28
9	SOT EF 02	Values and Ethics	3			3
10	SOTEF 05	Human rights and duties	3			3
11	SOTEF 07	NSS			4	2
12	SOTEF 09	Law for Engineers	3			3
Total (Elective Foundation)						11

Course Structure of B. Tech in Agricultural Engineering Programme

SECOND YEAR

Year	Semester	Core	Compulsory Foundation	Elective (Discipline)	Elective (Open)	Project, Training, Viva, Seminar	Total
II	III	26	4	0	0	0	30
	IV	26	4	0	0	0	30

Third Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	AECC01	Fluid Mechanics	3	0	0	3
2	AECC02	Strength of Material	3	0	0	4
3	AECC03	Thermodynamics and Heat Engines	3	0	0	3
4	AECC04	Surveying and Leveling	4	0	0	3
5	AECC05	Farm Machinery	3	0	0	3
6	AECC06	Fluid Mechanics Lab	0	0	4	2
7	AECC07	Surveying and Leveling Lab	0	0	4	2
8	AECC08	Farm Machinery Lab	0	0	4	2
9	AECC09	Crop Production Technology Lab	0	0	4	2
10	AECC10	Advanced Workshop Technology	0	0	4	2
Total Credits (CORE)						26
11	SOT CF18	Operations Research & Industrial Management	4			4
Total Credits (Compulsory Foundation)						4
Total Credits						30

Fourth Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	AECC11	Soil Science	3	0	0	3
2	AECC12	Kinetics and Dynamics of Machines	3	0	0	3
3	AECC13	Farm Power	3	0	0	4
4	AECC14	Watershed Hydrology	4	0	0	3
5	AECC15	Post Harvest Operations	3	0	0	3
6	AECC16	Soil Science Lab	0	0	4	2
7	AECC17	Farm Power Lab	0	0	4	2
8	AECC18	Watershed Hydrology Lab	0	0	4	2
9	AECC19	Post Harvest Operations Lab	0	0	4	2
10	AECC20	Food Chemistry and Microbiology Lab	0	0	4	2
Total Credits (CORE)						26
11	SOT CF 11	Probability And Statistics	4	0	0	4
Total Credits (Compulsory Foundation)						4
Total Credits						30

Course Structure of B. Tech in Agricultural Engineering Programme

THIRD YEAR

Year	Semester	Core	Compulsory Foundation	Elective (Discipline)	Elective (Open)	Project, Training, Viva, Seminar	Total
III	V	21	0	4	4	5	34
	VI	18	0	4	4	2	28

Fifth Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	AECC21	Machine Design	4	0	0	4
2	AECC22	Soil & Water Conservation Engg.	3	0	0	3
3	AECC23	Mechanical Operation in Food Processing	3	0	0	3
4	AECC24	Thermal Operation in Food Processing	3	0	0	3
5	AECC25	Machine Design and Drawing	0	0	4	2
6	AECC26	Soil & Water Conservation Engineering Lab	0	0	4	2
7	AECC27	Mechanical Food Operations Lab	0	0	4	2
8	AECC28	Thermal Food Operations Lab	0	0	4	2
Total Credits (CORE)						21
9	AEELXX#	Elective Discipline-I	4	0	0	4
Total Credits (Elective DISCIPLINE)						4
10	CSE/ECE ELXX*	Elective Open-I	4	0	0	4
Total Credits (Elective Open)						4
11	AEPT01	Summer Training- I				5
Total (Project, Training, Seminar, viva)						5
Total Credits						37

Sixth Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	AECC29	Soil Mechanics	3	0	0	3
2	AECC30	Irrigation & Drainage Engineering	3	0	0	3
3	AECC31	Refrigeration & Air Conditioning	3	0	0	3
4	AECC32	Testing & Evaluation of Tractors & Machines	3	0	0	3
5	AECC33	Soil Mechanics Lab	0	0	4	2
6	AECC34	Irrigation & Drainage Engineering Lab	0	0	4	2
7	AECC35	Testing & Evaluation of Tractors & Machines lab	0	0	4	2
Total Credits (CORE)						18
8	AEELXX#	Elective Discipline-II	4	0	0	4
Total (Elective DISCIPLINE)						4
9	CSE/ECE ELXX*	Elective Open- II	4	0	0	4
Total Credits (Elective Open)						4
10	AEPT02	Seminar & Technical Report Writing	0	0	4	2
Total (Project, Training, Seminar, viva)						2
Total Credits						28

XX Represents Serial No. of Paper Given in the List of Elective Papers Offer by the Department of Agricultural Engineering for B.Tech Course

* XX Represents Serial No. of Paper Given in the List of Elective Papers Offered by Department other than Agricultural Engineering

Course Structure of B. Tech in Agricultural Engineering Programme

FOURTH YEAR

Year	Semester	Core	Compulsory Foundation	Elective (Discipline)	Elective (Open)	Project, Training, Viva, Seminar	Total
IV	VII	7	0	8	4	15	34
	VIII	6	0	4	0	18	28

Seventh Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	AECC36	Building Materials & Structural Design	3	0	0	3
2	AECC37	Renewable Energy Sources	3	0	0	3
3	AECC38	Renewable Energy Sources Lab	0	0	2	1
Total (Core)						7
4	AEELXX [#]	Elective Discipline- III	4	0	0	4
5	AEELXX [#]	Elective Discipline-IV	4	0	0	4
Total (Elective Discipline)						8
6	CSE/ECE ELXX [*]	Elective Open- III				
Total (Elective Open)						4
7	AEPT03	Project – I	0	0	20	10
8	AEPT04	Summer Training – II				5
Total (Project, Training, Seminar, viva)						15
Total Credits						34

Eighth Semester

Sl. No.	Course Code	Course Title	Contact hours/week			Credits
			L	T	P	
1	AECC39	Fruits and Vegetable Processing	3	0	0	3
2	AECC40	Land and Water Resource Management	3	0	0	3
Total (Core)						6
3	AEELXX [#]	Elective Discipline- V	4	0	0	4
Total (Elective Discipline)						4
4	AEPT05	Project – II	0	0	30	15
5	AEPT06	Comprehensive viva				3
Total (Project, Training, Seminar, viva)						18
Total Credits						28

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