B.Tech Agricultural Engineering (5th Dean's Committee)

Semester I			Semester II			
Course No.	Title of the Course	Credit Hour	Course No.	Title of the Course	Credit Hour	
Math 201	Engineering Mathematics-I	3(2+1)	CE 106	Surveying and Levelling	3(1+2)	
Phys 203	Engineering Physics	3(2+1)	CE108	Engineering Mechanics	3(2+1)	
Chem 205	Engineering Chemistry	3(2+1)	ME 104	Workshop Technology and Practice	3(1+2)	
Soils 102	Principles of Soil Science	2(1+1)	ME 108	Heat and Mass Transfer	2(2+0)	
CSE 204	Computer Programming and Data Structures	3(1+2)	Agron 102	Principles of Agronomy	2(1+1)	
CE 105	Soil Mechanics	3(2+1)	Math 202	Engineering Mathematics-II	3(2+1)	
ME 103	Engineering Drawing	2(0+2)	ENV 101	Environmental studies and Disaster Management	2(2+0)	
Pbi 101/Pbicul 101	Basic Punjabi / Punjabi Culture	2(0+2)/ 2+0(NC)	HDFS 106	Human Values	1(1+0)	
NSS/NCC/ NSO	NSS/NCC/NSO	1(0+1)N C	Eng. 101	General English	2(1+1)	
				NSS/NCC/NSO	1(0+1)N C	
	Total 20(10+10)/ 22(10+12)/ 22(12+10)			Total 22(13+9)		

Semester III			Semester IV			
CE 207	Watershed Hydrology	2(1+1)	CSE 205	Web Designing and Internet Applications	2(1+1)	
CE 208	Strength of Materials	3(2+1)	ME 207	Theory of Machines	2(2+0)	
Hort. 203	Principles of Horticultural Crops and Plant Protection	2(1+1)	ME 202	Fluid Mechanics and Open Channel Hydraulics	3(2+1)	
FMP 201	Tractor and Farm Machinery Operation	1(0+1)	EE 206	Electronics and Instrumentati on	3(2+1)	
Math301	Engineering Mathematics- III	3(2+1)	SWE 202	Soil and Water Conservation Engineering	3(2+1)	
ME 208	Thermodynam ics, Refrigeration and Air Conditioning	3(2+1)	Mgt. 201	Entrepreneurs hip Development and Business Management	3(2+1)	
EE 204	Electrical Machines and Power Utilization	3(2+1)	SWE 203	Sprinkler and Micro Irrigation Systems	2(1+1)	
EST 201	Fundamentals of Renewable Energy Sources	3(2+1)	FMP 203	Farm Machinery and Equipment- I	3(2+1)	
SWE 201	Irrigation Engineering	3(2+1)	PFE 204	Engineering Properties of Agricultural Produce	2(1+1)	
NSS/NCC/N SO	NSS/NCC/NS O	1(0+1) NC	NSS/NCC/N SO	NSS/NCC/N SO	1(0+1) NC	
	Total 24(14+10)			Total 24(15+9)		

Semester V			Semester VI			
ME 302	Machine Design	2(2+0)	SWE 303	Watershed Planning and Management	3(2+1)	
CE 306	Building Construction and Cost Estimation	2(2+0)	SWE 304	Groundwater, Wells and Pumps	3(2+1)	
PFE 304	Agricultural Structures and Environmental Control	3(2+1)	FMP 307	Tractor Systems and Controls	3(2+1)	
PFE 305	Post Harvest Engineering of Cereals, Pulses and Oil Seeds	3(2+1)	FMP 311	Tractor and Farm Machinery Maintenance	1(0+1)	
FMP 302	Tractor and Automotive Engines	3(2+1)	PFE 306	Post Harvest Engineering of Horticultural Crops	3(2+1)	
SWE301	Water Harvesting and Soil Conservation Structures	3(2+1)	PFE 307	Dairy and Food Engineering	3(2+1)	
SWE 302	Drainage Engineering	2(1+1)	EST 302	Bio-energy Systems: Design and Applications	3(2+1)	
EST 301	Renewable Power Sources	3(2+1)	Eng.201	Communication Skills and Personality Development	2(1+1)	
FMP 306	Farm Machinery and Equipment-II	3(2+1)	CE 307	Design of Structures	3(2+1)	
EDT 391*	Educational Tour	2(0+2) NC				
	Total 26(17+9)			Total 24(15+9)		
*The students will register for Educational Tour in the V semester and will go on educational tour at the end of V semester during semester break.		**The students will register for Industrial Attachment in VII semester but the industrial attachment will start during the semester break at the end of VI semester and will carry on into the VII semester till 10 weeks are completed.				

Semester VII Student READY				Semester VIII Student READY		
IAP 491**	Industrial Attachment for Agricultural Engineering (10weeks)	10(0+10)		Elective course	3(2+1)	
SDT 491	Skill Development Training in Agricultural Engineering (7 weeks) SDT 1, SDT 2, SDT 3,SDT 4	10(0+10)		Elective course	3(2+1)	
ELP 491	Experiential Learning Program in Agricultural Engineering (11 weeks) ELP 1, ELP 2, ELP 3, ELP 4	10(0+10)		Elective course	3(2+1)	
			PPR 491	Project Planning and Report Writing	10(0+10)	
	Total 30(0+30)			Total 19(6+13)		

Students who do not opt Basic Punjabi and Punjabi culture

	Credit hours including			
Semester	NC	Theory	Practical	NC
Sem 1	20	10	10	1 NC
Sem 2	22	13	9	1 NC
Sem 3	24	14	10	1 NC
Sem 4	24	15	9	1 NC
Sem 5	26	17	9	2 NC
Sem 6	24	15	9	
Sem 7	30	0	30	10 NC
Sem 8	19	6	13	
Total	189	90	99	16 NC
Students with Basic Punjabi Semester Sem 1 Total	Credit hours including NC 22 191	Theory 10 90	Practical 12 101	NC 3NC 18 NC
Students with Punjabi Culture				
	Credit hours including			
Semester	NC	Theory	Practical	NC
Sem 1	22	12	10	22
Total	191	92	99	18 NC