

BIDHAN CHANDRA KRISHI VISWAVIDYALAYA



FACULTY OF AGRICULTURAL ENGINEERING

Mohanpur: Nadia (W. B)-741252

Course: B.Tech.(Agricultural Engineering).

ACADEMIC PROGRAMME

Semester wise course distributions

(With effect from the Session:2024-25 and onwards)

[As per recommendation of Sixth Dean's Committee, ICAR)

Semester-I

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
CC-101	Deeksharambh	0+2(NG) Non-gradial.	21(8+13)+ 2(Non-Gradial)
CC-102	Communication Skills	2(1+1)	
CC-103	Environmental Studies and Disaster Management.	3(2+1)	
CC-104	NSS- I/ NCC- I	1(0+1)	
SEC(I)-111	Skill Enhancement Course	4 (0+4)	
AE-111	Introduction to Agricultural Engineering	4(3+1)	
FMP-111	Engineering Drawing	2(0+2)	
FMP-112	Workshop Technology and Practice	2(0+2)	
PHE-111	Basic Electrical Gadgets and Instruments	3(2+1)	

Semester-II

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
CC-151	Farming Based Livelihood Systems	3 (2+1)	22(9+13)
CC-152	Personality Development	2 (1+1)	
CC-153	NSS- II/ NCC-II	1(0+1)	
SEC(II)-121	Skill Enhancement Course	4(0+4)	
AGR(A)-121	Crop Production and Protection Technologies	4 (3+1)	
SWE-121	Surveying and Levelling	3 (1+2)	
FAE-121	Computer Programming and Data Structures	2(0+2)	
FAE-122	Agricultural Informatics and Artificial Intelligence	3 (2+1)	

Post – Semester-II

F AE-123	Internship (for 10 weeks, only for exit option for award of UG-Certificate)	10(0+10)	
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Semester-III

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
AST(E)-231	Engineering Mathematics- I	3 (3+0)	24 (17+7)
PHY-231	Engineering Physics	3 (2+1)	
CHM-231	Engineering Chemistry	3 (2+1)	
FMP-231	Engineering Mechanics	3 (3+0)	
FMP-232	Theory of Machines	2 (2+0)	
SWE-231	Soil Mechanics	2 (1+1)	
SWE-232	Watershed Hydrology	3 (2+1)	
PHE-231	Engineering Properties of Agricultural Produce and Food Science	3 (2+1)	
CC- 201	Physical Education, First Aid, Yoga Practice and meditation	2 (0+2)	

Semester-IV

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
AST(E)-241	Engineering Mathematics-II	3 (3+0)	24 (18+6)
FMP-241	Farm Machinery & Equipment-I	3 (2+1)	
FMP-242	Machine Design	2(2+0)	
SWE-241	Theory of Structures	2 (1+1)	
SWE-242	Building Construction & Cost Estimation	2 (2+0)	
SWE-243	Soil and Water Conservation Engineering	3 (2+1)	
SWE-244	Fluid Mechanics and Open Channel Hydraulics	3 (2+1)	
PHE-241	Post-harvest Engineering of Cereals, Pulses and Oilseeds	3 (2+1)	
AEC-241	Entrepreneurship Development and Business Management	3 (2+1)	

Post – Semester-IV

FAE-241	Internship (For 10 weeks, only for exit option for award of UG-Diploma)	10(0+10)	
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Semester-V

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
FMP-351	Farm Machinery & Equipment-II	3 (2+1)	19(13+6) +2 (Non-gradual)
FMP-352	Tractor & Automotive Engines	3 (2+1)	
SWE-351	Strength of Materials	2 (1+1)	
SWE-352	Irrigation and Drainage Engineering	4 (3+1)	
FE-351	Thermodynamics and Heat Transfer	3 (3+0)	
FE-352	Refrigeration and Air-conditioning	3 (2+1)	
FAE-351	Seminar	1 (0+1)	
FAE-352	Study tour	2 (0+2)NG	

Semester-VI

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
FMP-361	Tractor Systems & Controls	3 (2+1)	23(12+11)
FMP-362	Renewable Energy Sources	3 (2+1)	
SWE-361	Groundwater, Wells and Pumps	3 (2+1)	
SWE-362	Agricultural Structures & Environment Control	3 (2+1)	
PHE-361	Post-Harvest Engineering of Horticultural Crops	2 (1+1)	
FE-361	Food and Dairy Engineering	4 (3+1)	
FAE-361	Case Study	1 (0+1)	
FAE-362	In-Plant Training-I	4(0+4)	

Semester-VII

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
AST(E)-471	Agricultural Statistics and Data Analysis	2 (1+1)	23(10+13)
FMP-471	Mechanics of Tillage and Traction	3 (2+1)	
FMP-472	Bioenergy Systems: Design and Applications	3 (2+1)	
SWE-471	Watershed Planning and Management	3 (2+1)	
SWE-472	Sprinkler & Micro Irrigation Systems	2 (1+1)	
PHE-471	Electrical Machines	3 (2+1)	
FAE-471	Project- I	3 (0+3)	
FAE-472	In-Plant Training-II (On campus)	4(0+4)	

Semester-VIII

Course No.	Title of the Course.	Credit Hours	Total Credit Hours.
FE-481	Food Quality and Safety`	3 (2+1)	18(8+10)
FAE-481	Sensors, AI and Robotics in Agriculture	3 (2+1)	
FAE-482	Project -II	4 (0+4)	
FMP-481	Engineering Graphics and Design	2 (0+2)	
DEPT.	Elective- II	3 (2+1)	
DEPT.	Elective- III	3 (2+1)	
OC-101	On-line courses-1	2(2+0)	6(6+0)
OC-102	On-line courses-1	2(2+0)	
OC-103	On-line courses-1	2(2+0)	
		Grand Total	174+6*

Secretary,
Faculty Council.
Faculty of Agricultural Engineering

Dean
Faculty of Agricultural Engineering

Dated: 08/07/2025..