

Name of Programme: M. Tech. (Agricultural Engineering) Soil and Water Conservation Engineering

Semester I	Course Title	Course No.	Credit Hours
Major Courses	Advanced Soil and Water Conservation Engineering	SWCE 501	2+1
	Applied Watershed Hydrology	SWCE 502	2+1
	Soil and Water Conservation Structures	SWCE 503	2+1
	Dryland Water Management Technologies	SWCE 510	2+0
Minor Courses	Minor Irrigation	IDE 510	2+1
	Water Resources Systems Engineering	IDE 513	2+1
Supporting Course	Statistical Methods for Applied Science	STAT 502	2+1
Non-Credit Compulsory Courses	Library and Information Services	PGS 501	1+0
	Intellectual Property and its management in Agriculture	PGS 503	1+0
	Basic Concepts in Laboratory Techniques	PGS 504	1+0

Semester II	Course Title	Course No.	Credit Hours
Major Courses	Watershed Management and Modeling	SWCE 503	2+1
	Climate Change and Water Resources	SWCE 508	3+0
	Remote Sensing and GIS for Land and Water Resource Management	SWCE 507	2+1
Minor Course	Big Data Analytics	CSE 501	2+0
Supporting Course	Soil Fertility and fertilizer use	Soil 502	2+1
Non-Credit Compulsory Courses	Technical Writing and Communication Skills	PGS 502	1+0
	Agricultural Research, Research Ethics and Rural Development Programmes	PGS 505	1+0

Semester III	Course Title	Course No.	Credit Hours
	Seminar	SWCE 591	0+1
	Comprehensive Examination		
	Master Research	SWCE 599	0+15

Semester IV	Course Title	Course No.	Credit Hours
	Master Research	SWCE 599	0+15

Name of Programme: Ph.D. (Agricultural Engineering) Soil and Water Conservation Engineering

Semester I	Course Title	Course No.	Credit Hours
Major Courses	Advances in Hydrology	SWCE 601	2+1
	Soil and Water Systems Simulation and Modeling	SWCE 602	2+1
	Modeling Soil Erosion Processes and Sedimentation	SWCE 604	2+1
Supporting Course	Machinery for Precision Agriculture	FMPE 517	2+1
Non-Credit Compulsory Courses	Library and Information Services	PGS 501	1+0
	Intellectual Property and its management in Agriculture	PGS 503	1+0
	Basic Concepts in Laboratory Techniques	PGS 504	1+0

Semester II	Course Title	Course No.	Credit Hours
Major Course	Reservoir Operation and River Basin Modeling	SWCE 603	2+1
Minor Courses	Hydro-Mechanics and Ground Water Modeling	IDE 603	3+0
	Advances in Drainage Engineering	IDE 510	2+1
Supporting Course	CPE-RPE		1+1
	Seminar-I	SWCE 691	0+1
Non-Credit Compulsory Courses	Technical Writing and Communication Skills	PGS 502	1+0
	Agricultural Research, Research Ethics and Rural Development Programmes	PGS 505	1+0

Semester III	Course Title	Course No.	Credit Hours
	Written and Oral Comprehensive Examination		
	Seminar -II	SWCE 692	0+1
Semester IV	Doctoral Research	SWCE 699	0+25
Semester V	Doctoral Research	SWCE 699	0+25
Semester VI	Doctoral Research	SWCE 699	0+25