



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Kakinada-533003, Andhra Pradesh (India)

Comparison of Program Structure R19 with R20

Program Code	Program Name	Total No. of Courses		No of Subjects			Total Courses	Percentage %
		R19	R20	Added in (R20)	Deleted (R19)	Content revised more than 20%		
021D19	M.Tech- Soil Mechanics and Foundation Engineering	28	30	5	4	0	9	32

Coordinator

J.N.T. University Kakinada
Kakinada-533003

REGISTRAR

HOD
PROFESSOR & HEAD
Department of Civil Engineering
University College of Engineering
JNTUK, KAKINADA-533 003



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Kakinada-533003, Andhra Pradesh (India)

Comparison of Course Structure R16 with R19

Program Code: 021D19

Program Name: M.Tech – Soil Mechanics & Foundation Engineering

Year: I

Semester: 1

R16							R19							Remarks		
Course code	Category	Course name	L	T	P	C	Course code	Category	Course name	L	T	P	C	New Course? (R20)	Deleted Course? (R19)	Content Revision %
MSFI-1	CORE	Advanced Mathematics	3	1	-	3									yes	
MSFI-2	CORE	Advanced soil mechanics	3	1	-	3	MSFI-1	CORE	Advanced soil mechanics	3	0	-	3			0
MSFI-3	CORE	Foundation Engineering - I	3	1	-	3	MSFI-2	CORE	Foundation Engineering - I	3	0	-	3			0

MSFI-4	Core	Ground Improvement Techniques	4	-	-	3	MSFI-3	Elective - I	Ground Improvement Techniques	3	0	-	3			0
MSFI-5	Elective-I	a) Designing with Geosynthetics	4	-	-	3	MSFI-4	Elective-II	a) Designing with Geosynthetics							0
MSFI-6	Elective-I	b) Soil-Foundation Interaction	4	-	-	3	MSFI-3	Elective-I	b) Soil-Foundation Interaction	3	0	-	3			0
MSFI-7	Elective-I	c) Critical State Soil Mechanics	4	-	-	3	MSFI-3	Elective-I	c) Critical State Soil Mechanics	3	0	-	3			0
MSFI-8	Elective-II	a) Earth Dams	4	-	-	3										
MSFI-9	Elective-II	b) Rock mechanics	4	-	-	3	MSFI-4	Elective-II	b) Rock mechanics							0
MSFI-10	Elective-II	c) Remote Sensing and Geographical Information Systems	4	-	-	3	MSFI-4	Elective-II	c) Remote Sensing and Geographical Information Systems							0
							MSFMC		Research Methodology and IPR	2	0	0	2	Yes		
MSFP-1	Lab	Advanced Geotechnical Engineering	-	-	4	2	MSFPI-1	Laboratory 1	Geotechnical Engineering	-	-	4	2			30

		laboratory						Lab-I								
						MSFPI-2	Laboratory 2	Geotechnical Engineering Lab-II	-	-	4	2			30	
						MSFA-1	Audit Course -1	Audit Course -1	2	0	0	0	Yes			
Total Credits							20	Total Credits							18	

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MSFII-1	CORE	Foundation Engg. – II	3	1	-	3	MSFII-1	CORE	Foundation Engg. – II	3	0	-	3			0
MSFII-2	CORE	Earth Retaining structures	3	1	-	3	MSFII-2	CORE	Earth Retaining structures	3	0	-	3			0
MSFII-3	CORE	Soil Dynamics & Machine Foundations	3	1	-	3	MSFII-4	Elective – IV	a) Earth dams	3	0	-	3			0
MSFII-4	Core	Construction in Expansive Soils	4	-	-	3	MSFII-4	Elective – IV	b) Construction in Expansive Soils	3	0	-	3			0
MSFII-5	Elective-III	a) Pavement Analysis, Design and Evaluation	4	-	-	3	MSFII-3	Elective-III	a) Pavement Analysis, Design and	3	0	-	3			0

									Evaluation							
MSFII-6	Elective-III	b) Construction Planning and Methods	4	-	-	3	MSFII-3	Elective-III	b) Construction Planning and Methods	3	0	-	3			0
MSFII-7	Elective-III	c) Geotechnical Earth Quake Engineering	4	-	-	3	MSFII-3	Elective-III	c) Geotechnical Earth Quake Engineering	3	0	-	3			0
MSFII-8	Elective-IV	a) Geo – Environmental Engg.,	4	-	-	3										
MSFII-9	Elective-IV	b) Numerical Methods in Geotechnical Engineering	4	-	-	3	MSFII-4	Elective-IV	c) Numerical Methods in Geotechnical Engineering							0
MSFII-10	Elective-IV	c) Finite Element Method	4	-	-	3										
MSFP-2	Lab	Computer Laboratory	-	-	4	2	MSFP-II-2	Laboratory 4	Software Design Lab	-	-	4	2			0
							MSFP-II-1	Laboratory 3	Geotechnical Engineering Lab-III	-	-	4	2	Yes		
							MSFMP	Core	Mini Project With Seminar	0	0	4	2			0
							MSFA-2	Audit Course -2	Audit Course -2	2	0	0	0	Yes		

Total Credits				20	Total Credits				18			
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Course code	Category	Course name	L	T	P	C	Course code	Category	Course name	L	T	P	C	New Course? (R20)	Deleted Course? (R19)	Content Revision %
MSFS-1	CORE	Seminar	-	-	-	2	MSFIII-1	Elective - V	a) Geo-Environmental Engineering	3	0	-	3			0
							MSFIII-1	Elective - V	b) Soil Dynamics & Machine Foundations	3	0	-	3			0
							MSFIII-1	Elective - V	c) Finite Element Method	3	0	-	3			0
							MSFIII-2	Open Elective	Open Elective / MOOCS	3	0	-	3	Yes		

MSFD-1	CORE	Design project	-	-	-	2									Yes	
MSFPR1	CORE	Dissertation/Thesis	-	-	-	16	Dissertation	Core	Dissertation Phase-I / Industrial Project (To be continued and Evaluated next Semester)*	-	-	20	10			0
Total Credits						20	Total Credits						16			

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MSFS-2	CORE	Seminar			-	2	Dissertation	CORE	Project/Dissertation Phase-II(continued from III semester)	0	0	32	16		Yes	
MSFD-2	CORE	Design Project				2									Yes	
MSFPR-2	CORE	Dissertation/Thesis				16										
Total credits						20	Total credits						16			

