

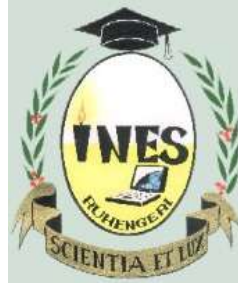


RUHENGERI INSTITUTE OF HIGHER EDUCATION

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INES-RUHENGERI



Faculty of Applied Fundamental Sciences (FAFS)

DEPARTMENT OF CIVIL ENGINEERING

MODULE DESCRIPTION

Musanze, June 2015



Programme structure

Year: 1, Level: 1, Semester: I

Module code	Module name	Lecture hrs	Seminar/ Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
LAN 1101	Languages	30	0	0	18	48	0
CEN 1101	Study Skills for Technology	20	8	14	12	54	10
MAT 1101	Engineering Mathematics I	30	0	0	18	48	10
PHY 1101	Engineering Physics	24	0	12	12	48	10
CHE 1101	Engineering Chemistry	24	8	14	8	54	10
CIT 1101	International Computer Driving License (ICDL)	28	0	14	12	54	10
CEN 1102	Engineering Drawing I	20	8	14	12	54	10
	Total	176	24	68	92	360	60

Year: 1, Level: 1, Semester: II

Module code	Module name	Lecture hrs	Seminar/ Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
LAN 1202	Languages II	30	0	0	18	48	0
MAT 1202	Engineering Mathematics II	30	0	0	18	48	10
PHY 1202	Basics of Electrical Engineering	24	0	12	12	48	10
CIT 1202	Computer Programming	28	0	14	12	54	10
CEN 1202	Engineering Drawing II	20	8	14	12	54	10
PHY 1203	Engineering Mechanics I (Statics)	24	0	12	12	48	10
CEN 1203	Workshop Technology (Masonry, Carpentry, Appropriate Technology & Electrical)	20	8	14	12	54	10
	Total	176	16	66	96	354	60



Year: 2, Level: 2, Semester: I

Module code	Module name	Lecture hrs	Seminar/Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
MAT 2103	Engineering Mathematics III	30	0	0	18	48	10
CEN 2104	Appropriate Sanitation Technology	20	8	10	10	48	10
CEN 2105	Building Materials	20	8	14	12	54	10
PHY 2104	Fluid Mechanics	24	0	12	12	48	10
CEN 2106	Strength of Materials	20	8	14	12	54	10
CEN 2107	Surveying I	20	8	14	12	54	10
	Total	134	32	62	76	306	60

Year: 2, Level: 2, Semester: II

Module code	Module name	Lecture hrs	Seminar/Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
MAT 2204	Engineering Mathematics IV	30	0	0	18	48	10
CEN 2208	Building Construction & Services	20	8	14	12	54	10
CEN 2209	Concrete Technology	20	8	14	12	54	10
CEN 2210	Engineering Hydrology	20	8	10	10	48	10
CEN 2211	Structural Analysis I	20	8	14	12	54	10
CEN 2212	Surveying II	20	8	14	12	54	10
CEN 2213	Surveying Camp (2 weeks)	NON-CREDITABLE					
CEN 2214	Industrial attachment I (8 weeks)	NON-CREDITABLE					
	Total	130	40	66	76	312	60

**Year: 3, Level: 3, Semester: I**

Module code	Module name	Lecture hrs	Seminar/Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
CEN 3115	Engineering Geology	20	8	10	10	48	10
CEN 3116	Irrigation & Drainage Engineering	20	8	10	10	48	10
CEN 3117	Highway Engineering	20	8	10	10	48	10
CEN 3118	Reinforced Concrete Design I	20	8	14	12	54	10
CEN 3119	Soil Mechanics	20	8	10	10	48	10
CEN 3120	Structural Analysis II	20	8	14	12	54	10
	Total	120	48	68	64	300	60

Year: 3, Level: 4, Semester: II

Module code	Module name	Lecture hrs	Seminar/Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
CEN 4221	Computer Aided Building Drawing	20	8	14	12	54	10
CEN 4222	Environmental Engineering I	20	8	10	10	48	10
CEN 4223	Estimating & Costing	20	8	14	12	54	10
CEN 4224	Foundation Engineering	20	8	10	10	48	10
CEN 4225	Reinforced Concrete Design II	20	8	14	12	54	10
CEN 4226	Transportation Engineering I	20	8	10	10	48	10
CEN 4227	Industrial Attachment II(8 weeks)	NON-CREDITABLE					
	Total	120	48	72	66	306	60

Year: 4, Level: 5, Semester: I



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Module code	Module name	Lecture hrs	Seminar/Workshop hrs	Practical class & laboratory	Structured exercises hrs	Total Contact hrs	Total Credit hrs
REM 5101	Research Methodology	36	0	0	12	48	
CEN 5128	Bridge Engineering	20	8	14	12	54	10
CEN 5129	Design of Steel & Timber Structures	20	8	14	12	54	10
CEN 5130	Environmental Engineering II	20	8	10	10	48	10
CEN 5131	Transportation Engineering II	20	8	10	10	48	10
CEN 5132	Project Work	0	10	0	0	10	10
	Total	116	42	48	56	262	60

Year: 4, Level: 5, Semester: II

Module code	Module name	Lecture hrs	Seminar/Workshop hrs	Practical class & laboratory hrs	Structured exercises hrs	Total Contact hrs	Total Credit hrs
CEN 5233	Construction Management	20	8	14	12	54	10
CEN 5234	Economics & Business Finance for Civil Engineers	20	8	14	12	54	10
CEN 5235	Engineering Ethics & Professional Conduct	20	8	14	12	54	10
CEN 5236	Introduction to GIS & RS	20	8	14	12	54	10
CEN 52**	Elective Subject	20	8	14	12	54	10
CEN 5132	Final Project Work						10
	Total	100	40	70	60	270	60



Practical Works:

Physics lab tests
Chemistry lab tests
Training Workshop
Strength of Materials lab tests
Soil Mechanics lab tests
Structural Engineering lab tests
Environmental Engineering lab tests

Mechanics lab tests
Computer Aided drafting lab
Surveying lab
GIS & RS lab

Elective modules

CEN 5237 Advanced Concrete Design
CEN 5238 Industrial Structures
CEN 5239 Prefabricated Structures
CEN 5240 Prestressed Concrete
CEN 5241 Software Application in Civil Engineering
CEN 5242 Airport & Railway Engineering
CEN 5243 Computer Analysis of Structures Water Resou
CEN 5244 Ground Improvement Techniques Soil