

ANITS - R-23 B.Tech (Civil Engineering) - Course Curriculum

I Year Course structure										
I Semester										
Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23PY1101	Engineering Physics	BS	3	3	0	0	3	40	60	100
23ME3203	Computer aided Engineering Graphics	ES	3	3	0	0	3	40	60	100
23MA1101	Linear Algebra and Multivariable Calculus	BS	3	3	0	0	3	40	60	100
23CY1102	Material Chemistry	BS	3	3	0	0	3	40	60	100
23CE4111	Civil Engineering Materials	PC	3	3	0	0	3	40	60	100
23PY1201	Engineering Physics Lab	BS	1.5	0	0	3	3	50	50	100
23CY1202	Material Chemistry lab	BS	1.5	0	0	3	3	50	50	100
23CE3201	Data Analysis and Presentation Tools	ES	1.5	0	0	3	3	50	50	100
23MC0101	Universal Human Values and Ethics-I	MC	0	2	0	0	2	100	0	100
Total			19.5				26	450	450	900
II Semester										
Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23EN2101	Communicative English	HSS	3	3	0	0	3	40	60	100
23MA1102	Ordinary Differential Equations and Numerical Methods	BS	3	3	0	0	3	40	60	100
23CS3101	Problem Solving and Programming using C	ES	3	3	0	0	3	40	60	100
23CE4112	Building Planning and Construction	PC	3	3	0	0	3	40	60	100
23CE1101	Engineering Geology	BS	3	3	0	0	3	40	60	100
23EN2201	Communicative English Lab	HSS	1.5	0	0	3	3	50	50	100
23CE3202	Civil Engineering Workshop	ES	1.5	0	0	3	3	50	50	100
23CS3201	Problem Solving and Programming using C lab	ES	1.5	0	0	3	3	50	50	100
23MC0102	Environmental Science	MC	0	2	0	0	2	100	0	100
Total			19.5				26	450	450	900

II Year Course structure										
III Semester										
Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23MA1103	Vector Calculus & Statistical Methods	BS	3	3	0	0	3	40	60	100
23CE3101	Engineering Mechanics	ES	3	3	0	0	3	40	60	100
23CE3102	Strength of Materials	ES	3	3	0	0	3	40	60	100
23CE3901	Surveying and Geomatics	ES	4	2	1	2	5	90	110	200
23CE2101	Universal Human Values and Ethics-II	HSS	3	3	0	0	3	40	60	100
23CE4911	Water Supply Engineering	PC	4	3	0	2	5	90	110	200
23CE3203	Strength of Materials Lab	ES	1.5	0	0	3	3	50	50	100
23CR9101	Logical Reasoning and Corporate skills	HSS	1	2	0	0	2	100	0	100
23MC0103	Constitution of India	MC	0	2	0	0	2	100	0	100
Total			22.5				29	590	510	1100
IV Semester										
Course Code	Title of the course	Category	Credits	L	T	P	Contact	CIE	SEE	Total
23CE4113	Concrete Technology	PC	2	2	0	0	2	40	60	100
23CE4114	Fluid Mechanics-I	PC	3	2	1	0	3	40	60	100
23CE4912	Geotechnical Engineering – I	PC	4	2	1	2	5	90	110	200
23CE4115	Highway Engineering	PC	3	2	1	0	3	40	60	100
23CE4116	Structural Analysis – I	PC	3	2	1	0	3	40	60	100
23CE4913	Wastewater Engineering	PC	4	2	1	2	5	90	110	200
23CE4211	Concrete Technology Lab	PC	1.5	0	0	3	3	50	50	100
23CR9102	Numerical Ability & Professional Communication skills	HSS	1	2	0	0	2	100	0	100
23MC0104	Health and Nutrition	MC	0	2	0	0	2	100	0	100
Total			21.5				28	590	510	1100
Note: Students undergo Internship - I during summer vacation after II year and Evaluated during III year I semester										

III Year Course structure

V Semester

Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23CE6111	Open Elective - I	OE	3	3	0	0	3	40	60	100
23CE5111	Professional Elective – I	PE	3	3	0	0	3	40	60	100
23CE4914	Fluid Mechanics-II	PC	4	2	1	2	5	90	110	200
23CE4915	Geotechnical Engineering – II	PC	4	2	1	2	5	90	110	200
23CE4117	Reinforced Concrete Structures-I	PC	3	3	0	0	3	40	60	100
23CE4118	Structural Analysis – II	PC	2	2	0	0	2	40	60	100
23CE9201	Building Planing and Design	SC	1.5	0	0	3	3	50	50	100
23CR9103	Quantitative Aptitude & Effective Communication skills	HSS	1	2	0	0	2	100	0	100
23CE4411	Internship-I*	PR	1	0	0	0	0	100	0	100
23MC0105	Entrepreneurship and Intellectual Property Rights	MC	0	2	0	0	2	100	0	100
Total			22.5				28	690	510	1200

VI Semester

Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23CE6121	Open Elective-II	OE	3	3	0	0	3	40	60	100
23CE5121	Professional Elective – II	PE	3	3	0	0	3	40	60	100
23CE4119	Steel Structures	PC	3	3	0	0	3	40	60	100
23CE4916	Fluid Mechanics-III	PC	4	2	1	2	5	90	110	200
23CE4120	Reinforced Concrete Structures-II	PC	3	3	0	0	3	40	60	100
23CE4121	Water Resouces Engineering - I	PC	3	3	0	0	3	40	60	100
23CR9104	High Level Reasoning & Employability Skills	HSS	1	2	0	0	2	100	0	100
23CE4611	Technical Seminar	PR	1.5	0	0	3	3	100	0	100
23MC0106	Financial Literacy	MC	0	2	0	0	2	100	0	100
Total			21.5				26	590	410	1000

Note: Students undergo Internship - II during summer vacation after III year and Evaluated during IV year I semester

Student shall register for MOOC's Courses for Open Elective - IV and Professional Elective - V at the end of III/IV - II Semester to enable timely completion.

IV Year Course structure**VII Semester**

Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23CE6131	Open Elective-III	OE	3	3	0	0	3	40	60	100
23CE5131	Professional Elective – III	PC	3	3	0	0	3	40	60	100
23CE5141	Professional Elective – IV (Dynamic)	PE	3	3	0	0	3	40	60	100
23CE4122	Estimation & Costing	PC	2	2	0	0	2	40	60	100
23CE4123	Water Resouces Engineering - II	PC	2	2	0	0	2	40	60	100
23CE4212	Highway Engineering lab	PC	1.5	0	0	3	3	50	50	100
23CE9202	Structural Analysis & Design using Software	SC	1.5	0	0	3	3	50	50	100
23CE4511	Project Work –I	PR	3	0	0	6	6	100	0	100
23CE4412	Internship-II	PR	2	0	0	0	0	100	0	100
Total			21				25	500	400	900

VIII Semester

Course Code	Title of the course	Category	Credits	L	T	P	Total	CIE	SEE	Total
23CE6141	Open Elective - IV (MOOCS)	OE	3	3	0	0	3	40	60	100
23CE5151	Professional Elective – V (MOOCs)	PE	3	3	0	0	3	40	60	100
23CE4512	Project Work –II	PR	8	0	0	16	16	50	50	100
Total			14				22	130	170	300