



VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

(Established by Rajasthan State Legislature and covered u/s 2(f) of the UGC Act, 1956)

FACULTY OF ENGINEERING & TECHNOLOGY

SCHEME & SYLLABUS

FOR

Bachelor of Technology (Civil Engineering)

(Implemented from Academic session 2018-19 and also for students admitted in 2015-16, 2016-17 and 2017-18)

Sem	III	IV	V	VI	VII	VIII	Total
Credits	24.5	25	24.5	24	25	16	139

Total Credits: 50 (I & II Semester) + 139 (III to VIII Semester) = 189

SESSION: 2018-19

VIT Campus, Sector-36, NRI Road, Sisyawas, Jagatpura, Jaipur (Raj.)-303012
Ph.: 0141-4077999 Fax: 4077900; Email: info@vgu.ac.in Website: www.vgu.ac.in

VIVEKANANDA GLOBAL UNIVERSITY, JAIPUR

TEACHING AND EXAMINATION SCHEME FOR BACHELOR OF TECHNOLOGY (CIVIL ENGINEERING)

(Implemented from Academic session 2018-19 and also for students admitted in 2015-16, 2016-17 and 2017-18)

III SEMESTER

Sr. No.	Subject Code	Subject Title	Teaching Hours (Per Week)			Credits
			Theory	Tutorial	Practical/ Sessional	
1	MAT 104	Advanced Engineering Mathematics	3	1	-	3.5
2	BCE 302	Surveying-I	3		-	3
3	BCE 303	Fluid Mechanics	3	1	-	3.5
4	BME 302	Strength of Materials	3	1	-	3.5
5	BCE 305	Engineering Geology	2	1	-	2.5
6	BCE 306	Building Materials & Construction	3	-		3
7	BCE 307	Fluid Mechanics Lab-I	-	-	2	1
8	BCE 308	Material Testing Lab			2	1
9	BCE 309	Building Constructions Drawing with computer			2	1
10	BCE 310	Surveying Lab-I	-	-	3	1.5
11	BCS 305	Object Oriented Programming with C++ Lab	-	-	2	1
Total			17	4	11	24.5

IV SEMESTER

Sr. No.	Subject Code	Subject Title	Teaching Hours (Per Week)			Credits
			Theory	Tutorial	Practical/ Sessional	
1	BCE 401	Advance Strength of Materials	3	1	-	3.5
2	BCE 402	Advanced Fluid Mechanics	3	1	-	3.5
3	BCE 403	Environmental Engg.-I	3	1		3.5
4	MGT 101	Sociology & Elements of Economics	3			3
5	BCE 405	Concrete Technology	3		-	3
6	BCE 406	Surveying-II	3		-	3
7	BCE 407	Fluid Mechanics Lab-II	-	-	2	1
8	BCE 408	Concrete Technology Lab	-	-	2	1
9	BCE 409	Surveying lab –II	-	-	3	1.5
10	BCE 410	Environmental Engg. Lab-I			2	1
11	BCE 411	CAD LAB	-	-	2	1
Total			18	3	11	25

V SEMESTER

Sr. No.	Subject Code	Subject Title	Teaching Hours (Per Week)			Credits
			Theory	Tutorial	Practical/Sessional	
1	BCE 501	Theory of Structures	3	1	-	3.5
2	BCE 502	Design of Steel Structures-I	3			3
3	BCE 503	Design of Concrete Structures-I	3		-	3
4	BCE 504	Environmental Engg.-II	3	1	-	3.5
5	BCE 505	Geotechnology-I	3	1	-	3.5
6	BCE 506	Project Planning & Management	2		-	2
7	BCE 507	Structural Mechanics Lab-I	-	-	2	1
8	BCE 508	Geotechnology Lab-I	-	-	2	1
9	BCE 509	Steel Structures Design –I	-	-	2	1
10	BCE 510	Environmental Engg. Lab –II			2	1
11	BCE 511	Concrete Structures Design - I	-	-	2	1
12	BCE 512	Design of water and waste water systems	-	-	2	1
Total			17	3	12	24.5

VI SEMESTER

Sr. No.	Subject Code	Subject Title	Teaching Hours (Per Week)			Credits
			Theory	Tutorial	Practical/ Sessional	
1	BCE 601	Design of Steel Structures-II	3			3
2	BCE 602	Irrigation Engineering	3		-	3
3	BCE 603	Design of Concrete Structures-II	3		-	3
4	BCE 604	Geotechnology-II	3	1	-	3.5
5	BCE 605	Transportation Engineering-I	3		-	3
6		Department Elective-I	3	1	-	3.5
7	BCE 606	Road material testing Lab	-	-	2	1
8	BCE 607	Geotechnology Lab-II	-	-	2	1
9	BCE 608	Steel Structures Design –II			2	1
10	BCE 609	Concrete Structures Design -II	-	-	2	1
11	BCE 610	Staad-Pro	-	-	2	1
Total			18	2	10	24

Note: Students shall devote 6 weeks to training after Sixth semester examination outside the College campus at approved works.

VII SEMESTER

Sr. No.	Subject Code	Subject Title	Teaching Hours (Per Week)			Credits
			Theory	Tutorial	Practical/ Sessional	
1	BCE 701	Water Resources & Systems Engineering	3	1	-	3.5
2	BCE 702	Transportation Engg.-II	3		-	3
3		Departmental Elective-II	3	1	-	3.5
4		Departmental Elective-III	3	1	-	3.5
5		Departmental Elective-IV	3	1	-	3.5
6	MGT 102	Entrepreneurship Development	3	-	-	3
7	BCE 704	Project-I	-	-	4	2
8	BCE 706	Practical Training Report	-	-	2	1
9	BCE 707	MX Road	-	-	2	1
10	BCE 708	Design Of Water Resources Structures			2	1
Total			15	4	12	25

VIII SEMESTER

Sr. No.	Subject Code	Subject Title	Teaching Hours (Per Week)			Credits
			Theory	Tutorial	Practical/ Sessional	
1	BCE 801	INDUSTRIAL TRAINING (INTERNSHIP)				16

Departmental Elective-I

CODE	SUBJECT	L	T	P/D	CREDITS
BCE 612	Hydro Electric Power Development	3	1	-	3.5
BCE 613	River Mechanics & Flood Control	3	1	-	3.5
BCE 614	Bridge Engineering	3	1	-	3.5
BCE 615	Rock Mechanics	3	1	-	3.5
BCE 616	Solid Waste Management	3	1	-	3.5

Departmental Elective-II

CODE	SUBJECT	L	T	P/D	CREDITS
BCE 714	Machine Foundations	3	1	-	3.5
BCE 715	Advanced composite materials for structures	3	1	-	3.5
BCE 716	Renewable Source of Energy	3	1	-	3.5
BCE 717	Elements of Earthquake Engineering	3	1	-	3.5
BCE 718	Transport Planning	3	1	-	3.5
BCE 719	Fundamentals of Energy and Climate Change	3	1	-	3.5
BCE 720	Site Organization and Management	3	1	-	3.5

Departmental Elective-III

CODE	SUBJECT	L	T	P/D	CREDITS
BCE 721	Advanced Traffic Engineering	3	1	-	3.5
BCE 722	Ground Water Hydrology	3	1	-	3.5
BCE 723	Design of Hydraulic Structures	3	1	-	3.5
BCE 724	Repair & rehabilitation of structure	3	1	-	3.5
BCE 725	Environmental Impact Assessment	3	1	-	3.5
BCE 726	Design of multi story structures	3	1	-	3.5
BCE 735	Quantity Surveying and Valuation	3	1	-	3.5

Departmental Elective-IV

CODE	SUBJECT	L	T	P/D	CREDITS
BCE 727	Introduction to Finite Element Method	3	1	-	3.5
BCE 728	Structural Optimization	3	1	-	3.5
BCE 729	Geo-synthetics Engineering	3	1	-	3.5
BCE 730	Seismic Design of structures	3	1	-	3.5
BCE 731	Architecture and town Planning	3	1	-	3.5
BCE 732	Disaster Management	3	1	-	3.5
BCE 733	Remote Sensing & GIS	3	1	-	3.5
BCE 734	Industrial Waste Water Treatment	3	1	-	3.5