## **Department of Civil Engineering**

# Guru Jambheshwar University of Science and Technology, Hisar

### Scheme of B.Tech (Civil Engg.) 2019-20 onwards

	SEMESTER-3							
Category	Course Code	Course Name	Teac	Teaching Schedule			Credits	Duration of Exam (Hrs)
			L	T	P			
BS	BSC 201-T	Mathematics –III	3	0	0	3	3	3
ESC	ESC-202-T	Engg. Mechanics	3	0	0	3	3	3
HSMC	HSMC -CVE201-T	Introduction to Civil engg.	3	0	0	3	3	3
PCC	PCC-CVE201-T	Surveying –I	3	0	0	3	3	3
PCC	PCC-CVE203-T	Engg. Geology	3	0	0	3	3	3
PCC	PCC-CVE205-T	Disaster Preparedness & Planning	2	0	0	2	2	3
PCC	PCC-CVE201-P	Surveying –I Lab	0	0	2	2	1	3
PCC	PCC-CVE203-P	Engg. Geology Lab	0	0	2	2	1	3
MC	MC 102-T	Environmental Science	3	0	0	3	0	3
	TOTAL			•	•			19

MC-Mandatory Course, which will be a non-credit subject and the student has to get pass marks to qualify for the award of the degree

	SEMESTER-4							
Category	Course Code	Course Name	Teaching Schedule		Hours/ Week	Credits	Duration of Exam (Hrs)	
			L	T	P			
HSMC	HSMC-CVE202-T	Civil Engg- Societal & Global Impact	2	0	0	2	2	3
PCC	PCC-CVE202-T	Introduction to Fluid Mechanics	3	0	0	3	3	3
PCC	PCC-CVE204-T	Structural Analysis –I	3	0	0	3	3	3
PCC	PCC-CVE206-T	Engg Building and Drawing	3	0	0	3	3	3
PCC	PCC-CVE208-T	Environmental Engg.	3	0	0	3	3	3
PCC	PCC-CVE202-P	Introduction to Fluid Mechanics Lab	0	0	2	2	1	3
PCC	PCC-CVE204-P	Structural Analysis –I Lab	0	0	2	2	1	3
PCC	PCC-CVE206-P	Engg Building and Drawing Lab	0	0	2	2	1	3
PCC	PCC-CVE208-P	Environmental Engg. Lab	0	0	2	2	1	3
TOTAL							18	

Note: The students will have to undergo survey camp within 4 weeks duration during summer vacations which will be evaluated in 5th sem.

	SEMESTER-5							
Category	Course Code	Course Name	Teachi	ng Sched	lule	Hours/ Week	Credits	Duration of Exam
			L	T	P			(Hrs)
PCC	PCC-CVE301-T	Advanced Fluid mechanics	3	0	0	3	3	3
PCC	PCC-CVE303-T	Structural Analysis-II	3	0	0	3	3	3

PCC	PCC-CVE-305-T	Surveying –II	3	0	0	3	3	3
PCC	PCC-CVE307- T	Design of Concrete	3	0	0	3	3	3
		structures-I						
PCC	PCC-CVE301-P	Advanced Fluid	0	0	2	2	1	3
		mechanics Lab						
PCC	PCC-CVE303-P	Structural Analysis-II	0	0	2	2	1	3
PCC	PCC-CVE305-P	Surveying –II Lab	0	0	2	2	1	3
PCC	PCC-CVE307- P	Design of Concrete	0	0	2	2	1	3
		structures-I						
OE	OEC-I	Open elective -I	3	0	0	3	3	3
HSMC	HSMC 301-T	Economics for Engineers	2	0	0	2	2	3
INT	INT-CVE-301-P	Survey Camp	0	0	0	0	1	3
MC	MC 104-T	Essence of Indian	3	0	0	3	0	3
		Traditional Knowledge						
	TOTAL						22	2

NOTE: Assessment of survey camp will be based on presentation/seminar, viva-voce, report and fieldwork at the end of 4th sem.

**OEC-I** is to be offered by other Departments.

#### **SEMESTER-6**

Category	Course Code	Course Name	Teachi	Teaching Schedule		Hours/ Week	Credits	Duration of Exam
			L	Т	P			(Hrs)
PCC	PCC-CVE302-T	Transportation EnggI	3	0	0	3	3	3
PCC	PCC-CVE304-T	Sewerage and Sewage Treatment	2	0	0	2	2	3
PCC	PCC-CVE306-T	Soil Mechanics	3	0	0	3	3	3
PCC	PCC-CVE308-T	Design of Steel Structures-I	3	0	0	3	3	3
PCC	PCC-CVE302-P	Transportation EnggI Lab	0	0	2	2	1	3
PCC	PCC-CVE304-P	Sewerage and Sewage Treatment Lab	0	0	2	2	1	3
PCC	PCC-CVE306-P	Soil Mechanics lab	0	0	2	2	1	3
PE	PEC-I	Program Elective -I	3	0	0	3	3	3
OE	OEC-II	Open elective -II	3	0	0	3	3	3
HSMC	HSMC –302-T	Fundamentals of management for Engineers	2	0	0	2	2	3
-	TOTAL							2

Note: At the end of 6th sem, each student will undergo 4 to 6 weeks Internship/Practical Training -II in an industry/Research Institute.

**OEC-II** is to be offered by other Departments.

#### **SEMESTER-7**

Categor y	Course Code	Course Name	Teaching Schedule		Hours/ Week	Credits	Duration of Exam	
			L	T	P			(Hrs)
PCC	PCC-CVE401-T	Estimation, Costing and Valuation	3	0	0	3	3	3
PCC	PCC-CVE403-T	Transportation EnggII	3	0	0	3	3	3

PCC	PCC-CVE405-T	Foundation engineering	3	0	0	3	3	3
PE	PEC-II	Program Elective -II	3	0	0	3	3	3
PE	PEC-III	Program Elective -III	3	0	0	3	3	3
OE	OEC-III	Open elective -III	3	0	0	3	3	3
PROJ*	PROJ-CVE401-P	PROJECT -I	0	0	8	8	4	3
INT**	INT-CVE-401-P	Industrial Training-II	0	0	2	2	1	3
		TOTAL					23	3

#### NOTE:

- \* The project should be initiated by the student in the beginning of 7th sem and will be evaluated at the end of the semester based on a presentation delivered, viva-voce and report by an external examiner
- \*\*Assessment of Industrial Training-II will be based on presentation/seminar, viva-voce, report and certificate for the practical training taken at the end of 4th sem.
- \*\*\* A viva of the students will be taken by an external examiner (Principal/Director/Professor/or any senior Person with Experience more than 10 years) at the end of the semester.

**OEC-III** is to be offered by other Departments

SEMESTER-8																		
Category	Course Code	Course Name	Teaching Schedule		Teaching Schedule		Teaching Schedule		Teaching Schedule		Teaching Schedule		Teaching Schedule		S	Hours/ Week		Duration of Exam
			L	T	P			(Hrs)										
PCC	PCC-CVE402-T	Construction Engg. & Management	3	0	0	3	3	3										
PCC	PCC-CVE404-T	Hydrology and Water Resources	3	0	0	3	3	3										
PE	PEC-IV	Program Elective -IV	3	0	0	3	3	3										
PE	PEC-V	Program Elective -V	3	0	0	3	3	3										
PROJ*	PROJ-CVE402-P	PROJECT-II	0	0	10	10	5	3										
PROJ	PROJ-CVE404-P	SEMINAR	0	0	2	2	1	3										
		TOTAL		•	•	•	1	8										

NOTE: \* The project should be initiated by the student in continuation of the 7th sem and will be evaluated at the end of the 8th semester based on its implementation (software/hardware), presentation delivered, viva-voce and report by an external examiner and chairperson

Program Elective-I	
1.Air & Noise Pollution Control	PEC-CVE350-T
2. Solid and Hazardous Waste Management	PEC-CVE351-T
3. Environmental Impact Assessment and Life Cycle Analyses	PEC-CVE352-T
. 4. Water and Air Quality Modelling	PEC-CVE353-T
Any one MOOC Course-Not Studied( to be studied)	till now of 3 credits
Program Elective-II	
Pavement Design	PEC-CVE450-T
2. Geometric Design of Highways	PEC-CVE451-T
3. Traffic Engg. & Management	PEC-CVE452-T
Any one MOOC Course-Not Studied ( to be studied	) till now of 3 credits
Program Elective-III	
Construction Management	PEC-CVE453-T
2. Advanced Construction Materials	PEC-CVE454-T
3. Advanced Construction Techniques	PEC-CVE455-T
Any one MOOC Course-Not Studied ( to be studied	till now of 3 credits
Program Elective-IV	

Design of Concrete Structures-II	PEC-CVE456-T				
2. Design of Steel Structures -II	PEC-CVE457-T				
3. Advanced Structural Analysis	PEC-CVE458-T				
4. Bridge Engineering	PEC-CVE459-T				
Any one MOOC Course-Not Studied( to be studie	d) till now of 3 credits				
Program Elective-V					
Irrigation & Design of Hydraulic Structures	PEC-CVE460-T				
2. Open Channel Flow	PEC-CVE461-T				
3. Groundwater Engg	PEC-CVE462-T				
Any one MOOC Course-Not Studied( to be studied) till now of 3 credits					