

<b>CRITERION 2</b>	<b>PROGRAM CURRICULUM AND TEACHING- LEARNING PROCESSES</b>	<b>Max. Marks: 100 Claimed:92</b>
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## 2.1 PROGRAM CURRICULUM (28)

### 2.1.1 State the process for designing the program curriculum (9)

The program curriculum is designed keeping in view the broad guidelines of the Institute, inputs from other premier institutes, like Indian Institutes of Technology (IITs)/National Institutes of Technologies (NITs), guidelines of Ministry of Education (MoE), formerly the Ministry of Human Resource Development (MHRD) / All India Council for Technical Education (AICTE), industry demands, and to meet the requirements of Program Outcomes (POs) and Program Educational Objectives (PEOs) of the Department of Civil Engineering.

Inputs and suggestions from students, academia, Industry persons/ employers, alumni and parents are used while designing academic curriculum for the four (04)-year Bachelor of Technology (B. Tech.) program. Technological developments constitute important criterion for designing the B.Tech. program curriculum. The faculty members prepare the course content to meet the requirements of Course Objectives (COs). The individual courses are discussed specifically for their outcomes in the Departmental Faculty Board (DFB) meetings. After incorporating the suggestions made in these forums, the curriculum is placed in the Department Undergraduate Committee (DUGC). The Department Undergraduate Committee (DUGC) discusses the contents of the curriculum and evaluates the curriculum in terms of POs, PEOs and various inputs. The committee is a statutory body and comprises of:

Head of Department, One Professor	Chairperson Convenor
Two Professors & One Associate Professor of Department by rotation external expert from another department	Members One Member
Three student members based on highest CGPA	Student Members

Once the curriculum is recommended by the DUGC, it is placed in the Senate of the Institute, which is the highest academic body of the institute. The Senate of the NIT Srinagar is chaired by the Director and comprises of all Professors/ Deans/ HODs of the Institute as members and as per the NIT's Statutes.

In addition to the Institute members, it has at least three subject expert members from academia of outside institutes of repute, one member each from Industry and from alumni. The presence of outsiders and alumni ensures that the curriculum is designed to meet the present-day requirements and challenges of the Civil Engineering profession / industry. The process for designing the program curriculum is illustrated in Figure 2.1. The suggestions / inputs from the stake-

holders are obtained through feedback collections in predesigned formats and during formal /informal meetings organized by the Department. For the Academic Year 2019-2020, the feedbacks of different kinds were obtained using online platforms (such as google forms) in view COVID-19 and other lockdowns in the Union Territory of Jammu and Kashmir.

#### **2.1.1.1 Stakeholders of the Programme:**

The department has identified the following stake holders for the B.Tech. programme in Civil Engineering:

- Students
- Faculty
- Industry / Employers
- Alumni
- Parents

##### **Students:**

- Students have a most important role in the B. Tech. programme as they are the end products.
- Students' feedback is/will be considered to introduce innovative teaching and learning methodologies.
- The inputs from students will help the programme to introduce the electives courses required to meet the current trend.

##### **Faculty:**

- Faculty has a vital role in the working / running of programme.
- Faculty is involved in various committees to check the consistency of the programme.
- Faculty provides valuable inputs for the design of the programme, establishments of PEOs and POs, Course Outcomes (COs) and their assessment.

##### **Industry / Employer:**

- Represent the end user of our graduates.
- Provides valuable inputs to shape the curriculum and hence enhance the employability of the graduates.

##### **Alumni:**

- Alumni constitute the focus group as they are the measure of success of the programme.
- Valuable feedback is obtained from the alumni regarding recent trends in engineering which helps in curriculum design.

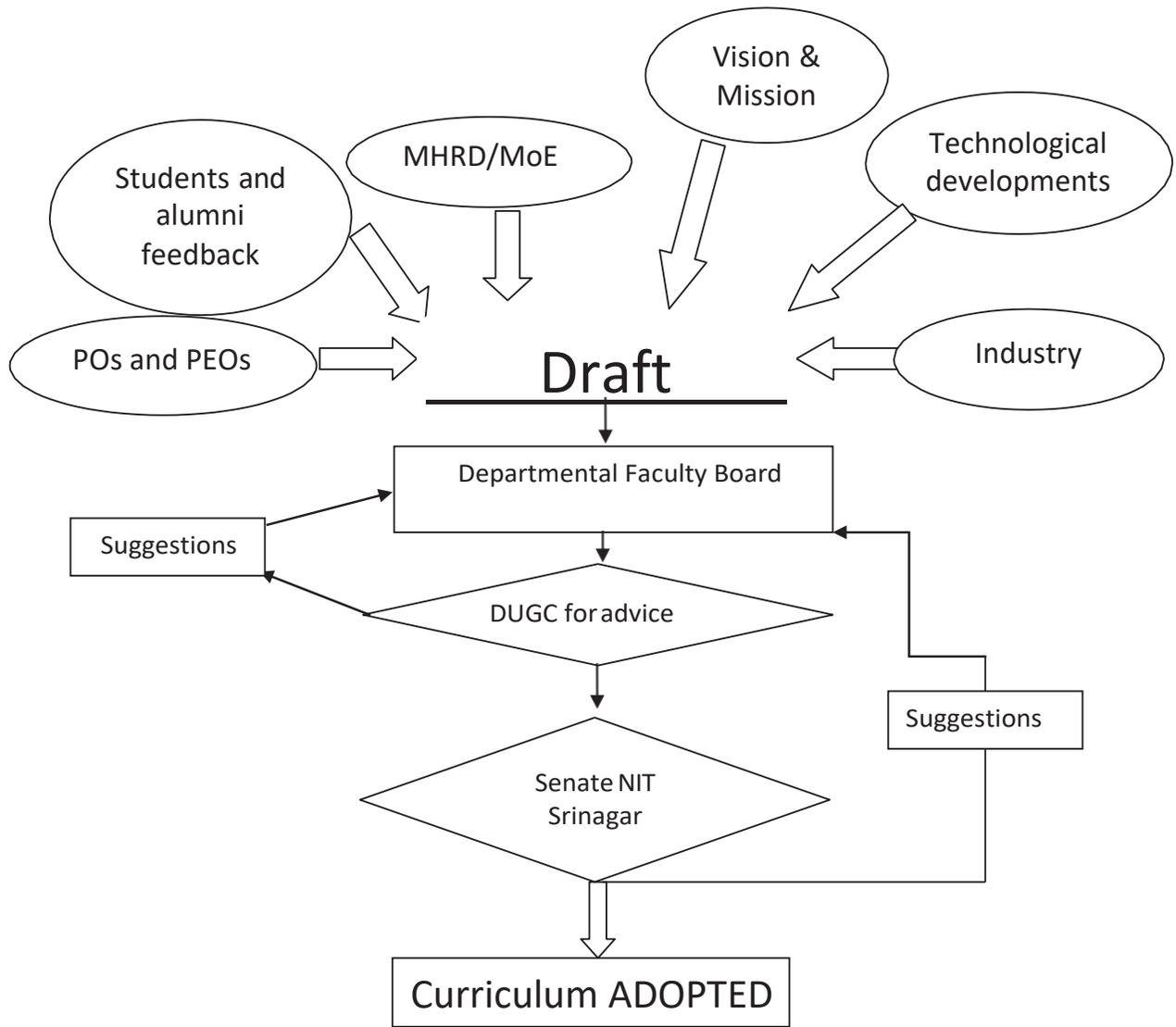
##### **Parents:**

- Inputs are received through contacts by phone/email and sometimes in-person meetings.

##### **Professional bodies:**

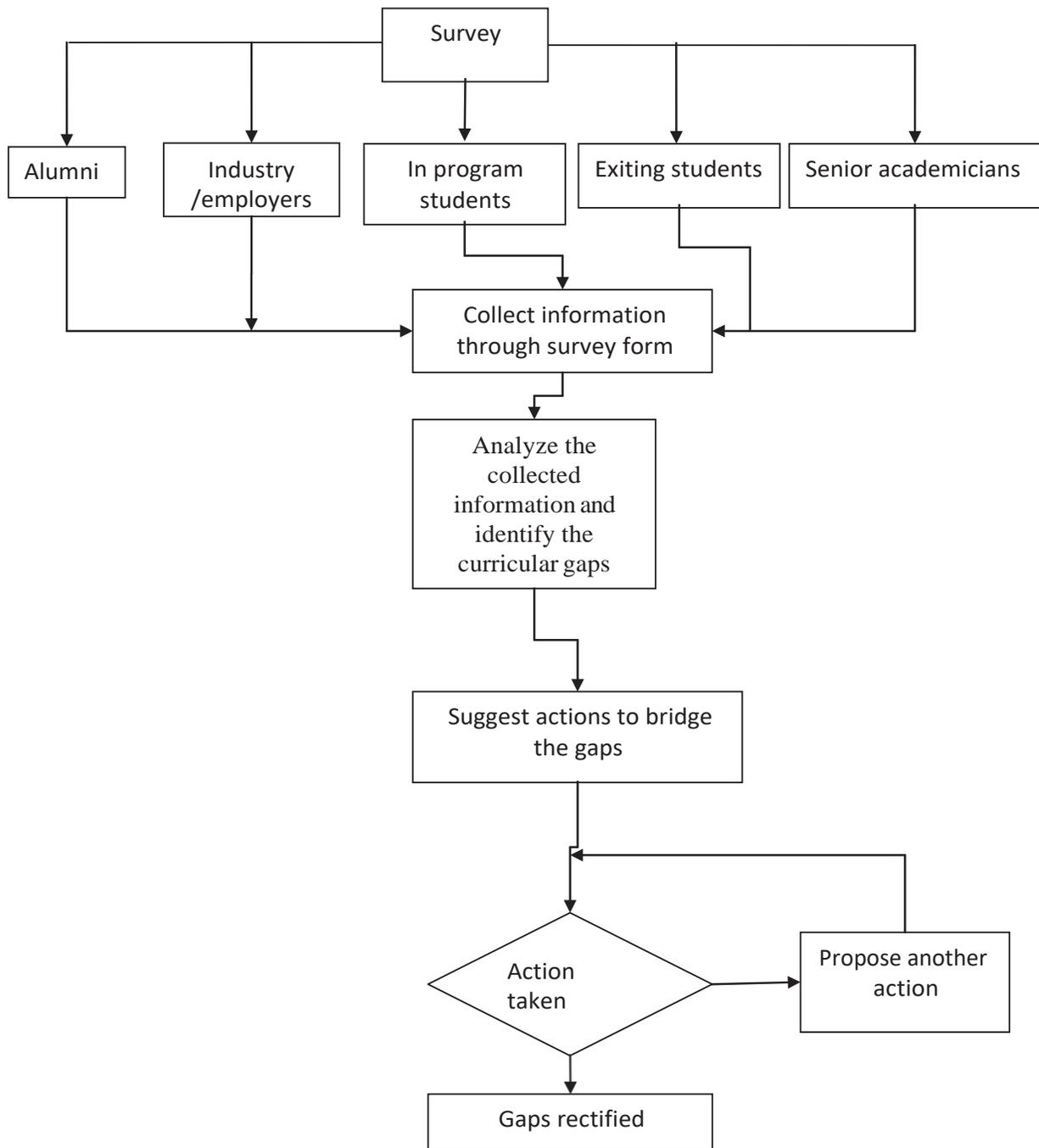
- The inputs of the members of various professional bodies provide a platform to disseminate the information regarding the recent trends in the field and are relevant to update and upgrade the programme.

**Process of designing the programme curriculum:**



**Figure B.2.1.1.1a; DUGC-Departmental Undergraduate Committee**

**Flow chart showing identification of curriculum gaps:**



**Figure B.2.1.1.1b**

**2.1.2 Structure of the Curriculum (4)**

The curriculum finalized by the department after following the due process mentioned in the preceding paragraphs and is detailed in the Tables B.2.1.3 and B.2.1.4, respectively, for years 2016 and 2019 onwards:

**Course Curriculum Scheme - 2016**

Course Code	Course title	Total number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
CIV-102	Engineering Drawing	2	0	4	6	4
CIV-210	Strength of Materials	3	1	0	4	4
CIV-301	Structural Analysis –I	3	2	0	5	4
CIV-301 (P)	Structural Engineering Lab –I	0	0	2	2	1
CIV-302	Fluid Mechanics	3	1	0	4	3
CIV-302 (P)	Fluid Mechanics Lab- I	0	0	2	2	1
CIV-303	Surveying –I	3	1	0	4	3
CIV-303 (P)	Surveying Lab –I	0	0	4	4	2
MTH-303	Mathematics – I	3	1	0	4	3
ELE-304	Basic Electrical Engineering	3	1	0	4	3
ELE-304 (P)	Basic Electrical Engineering Lab	0	0	2	2	1
HSS-301	Humanities and Social Science - I	3	1	0	4	3
CIV-300	Professional Development Activities	0	0	2	2	1
CIV-304	Geology and Mineralogy	3	2	0	5	4
CIV-304 (P)	Geology and Mineralogy Lab	0	0	2	2	1
CIV-401	Structural Analysis – II	3	1	0	4	3
CIV-402	Fluid Flow in Pipes and Channels	3	1	0	4	3
CIV-402 (P)	Fluid Mechanics lab –II	0	0	2	2	1
CIV-403	Surveying –II	3	1	0	4	3
CIV-403 (P)	Surveying Lab –II	0	0	2	2	1
CIV-403 (SC)	Surveying Camp	0	0	4	4	2
CIV-404	Engineering Geology and Materials	3	1	0	4	3
CIV-404 (P)	Geology Lab	0	0	2	2	1
CIV-405	Building Drawing and Constructions	3	2	0	5	4
MTH-406	Mathematics – II	3	1	0	4	3
CIV- 400	Professional Development Activities	0	0	2	2	1
CIV-501	Deign of Structures – I	3	2	0	5	4
CIV-501 (P)	Concrete Laboratory	0	0	2	2	1
CIV-502	Highway Engineering and PMS	3	1	0	4	3
CIV-502 (P)	Highway Laboratory	0	0	2	2	1
CIV-503	Geotechnical Engineering – I	3	2	0	5	4
CIV-503 (P)	Geotechnical Laboratory – I	0	0	2	2	1
CIV-504	Water Resource Engineering	3	2	0	5	4

Criterion 2

CIV-505	Structural Analysis –III	3	1	0	4	3
CIV-500	Professional Development Activities	0	0	2	2	1
CIV- 506: EI	Architecture and Town Planning	3	1	0	4	3
	Concrete Technology					
	Engineering Seismology					
CIV-507	Hydraulics and Hydraulic Machines	3	2	0	5	4
CIV-601	Deign of Structures – II	3	2	0	5	4
CIV-601 (P)	Structural Engineering Lab -II	0	0	2	2	1
CIV-602	Traffic Engineering and Road Facilities	3	2	0	5	4
CIV-602 (P)	Traffic Engineering Laboratory	0	0	2	2	1
CIV-603	Geotechnical Engineering – II	3	2	0	5	4
CIV-603 (P)	Geotechnical Laboratory – II	0	0	2	2	1
CIV-604	Irrigation and Hydraulic Structures	3	1	0	4	3
CIV-600	Professional Development Activities	0	0	2	2	1
CIV-611: EI	Water Shed Management	3	1	0	4	3
MTH- 611: EI	Operations and Research					
PHY- ELE: EI	Solar Architecture					
CIV- 612: E2	Computer Aided Design	3	1	0	4	3
	Disaster Management					
	Applied Hydrology					
	Advanced Structural Analysis					
CIV-701	Environmental Engineering-I	3	1	0	4	3
CIV-701(P)	Water Quality Lab	0	0	2	2	1
CIV-702	Structural Dynamics	3	1	0	4	3
CIV-703	Construction Technology And Management	3	1	0	4	3
CIV-704	Design of Structures -III	3	2	0	5	4
CIV-705	Quantity Surveying and Cost Evaluation	3	1	0	4	3
CIV-706	Seminar	0	2	0	2	2
CIV-707	Project Pre-work	0	0	4	4	2
CIV-700	Professional Development Activities	0	0	2	2	1
CIV-711:E1	Railway and Airport Engineering	3	1	0	4	3
	Fluvial Hydraulics					
	Advance Geotechnical Engineering					
CIV-801	Hydropower Engineering	3	2	0	5	4
CIV-802	Bridge Engineering	3	1	0	4	3
CIV-803	Project	0	5	10	15	10

CIV-804	Practical Training & Viva-Voce	0	0	0	0	2
CIV- 811:E1	Rock Mechanics & Tunneling Technology	3	1	0	4	3
	Transportation Planning & Economics					
MTH-811	Numerical Methods in Civil Engineering	3	1	0	4	3
CIV-812:E2	Ground Improvement Techniques	3	1	0	4	3
	Earthquake Resistant Design					
	Environment Engineering II					

Table B.2.1.3

**Course Curriculum Scheme - 2019**

Course Code	Course title	Total number of contact hours				Credits
		Lecture (L)	Tutorial (T)	Practical (P)	Total Hours	
CIP100	Engineering Drawing	1	0	6	7	4
CIL100	Engineering Mechanics	3	1	0	4	4
MEL100	Elements of Mechanical Engg.	2	1	0	3	3
PHL100	Engineering Physics	3	1	0	4	4
HUL100	Basic English and Communication Skills	2	1	0	3	3
CYL101	Environmental Studies	2	1	0	3	3
MAL100	Mathematics I	3	1	0	4	4
HUP100	Language Laboratory	0	0	2	2	1
PHP100	Physics Laboratory	0	0	2	2	1
WSP100	Workshop Practice	0	0	5	5	2
HUL101	Advanced English Comm. Skills & Organizational Behavior.	2	1	0	3	3
EEL100	Basic Electrical Engineering	3	1	0	4	4
ITL100	Computer Programming	2	1	0	3	3
CYL100	Engineering Chemistry	3	1	0	4	4
MAL101	Mathematics II	3	1	0	4	4
ELP100	Basic Electrical Engineering Laboratory	0	0	2	2	1
CYP100	Chemistry Laboratory	0	0	2	2	1
ITP100	Computer Programming Laboratory	0	0	2	2	1
CVT201	Structural Analysis –I	2	2	0	4	4
CVL201	Structural Analysis Lab –I	0	0	2	2	1
CVT202	Fluid Mechanics	2	1	0	3	3
CVL202	Fluid Mechanics Lab- I	0	0	2	2	1
CVT203	Surveying –I	2	1	0	4	3
CVL203	Surveying Lab –I	0	0	4	4	2
MAT201	Mathematics – I	3	1	0	4	4
CVT204	Building Materials and Construction	3	1	0	4	4

Criterion 2

HUL201	Humanities and Social Science - I	2	1	0	3	3
CVT250	Structural Analysis – II	2	1	0	3	3
CVT251	Fluid Flow in Pipes and Channels	2	1	0	3	3
CVL251	Fluid Mechanics lab –II	0	0	2	2	1
CVT252	Surveying –II	2	1	0	3	3
CVL252	Surveying Lab –II	0	0	2	2	1
CVT255	Surveying Camp	0	0	4	4	2
CVT253	Engineering Geology	2	1	0	3	3
CVL253	Geology Lab	0	0	2	2	1
CVT254	Civil Engineering Drawing	3	1	0	4	4
MAT256	Mathematics – II	3	1	0	4	4
CVT301	Deign of Structures – I	2	2	0	4	4
CVL301	Concrete Laboratory	0	0	2	2	1
CVT302	Highway Engineering and PMS	3	1	0	4	4
CVL302	Highway Laboratory	0	0	2	2	1
CVT303	Geotechnical Engineering – I	2	2	0	4	4
CVL303	Geotechnical Laboratory – I	0	0	2	2	1
CVT304	Water Resource Engineering	2	2	0	4	4
CVT305	Structural Analysis –III	2	1	0	3	3
CVT307	Architecture and Town Planning					
	Concrete Technology	2	1	0	3	3
	Engineering Seismology					
CVT350	Deign of Structures – II	2	2	0	4	4
CVL350	Structural Engineering Lab -II	0	0	2	2	1
CVT351	Traffic Engineering and Road Facilities	2	2	0	4	4
CVL351	Traffic Engineering Laboratory	0	0	2	2	1
CVT352	Geotechnical Engineering – II	2	2	0	4	4
CVL352	Geotechnical Laboratory – II	0	0	2	2	1
CVT353	Irrigation and Hydraulic Structures	2	1	0	3	3
CVT453	Industrial Training & Presentation	0	0	0	0	1
CVT/MAT	Water Shed Management					
	Operations and Research					
	Numerical Methods in Civil Engineering	2	1	0	3	3
CVT354	Computer Aided Design	2	1	0	3	3
	Disaster Management					
	Applied Hydrology					
	Advanced Structural Analysis					
CVT401	Environmental Engineering-I	2	1	0	3	3
CVL401	Water Quality Lab	0	0	2	2	1
CVT402	Structural Dynamics	3	1	0	4	4
CVT403	Construction Technology & Management	2	1	0	3	3

CVT404	Design of Structures -III	2	2	0	4	4
CVT405	Quantity Surveying and Cost Evaluation	2	1	0	3	3
CVS405	Seminar	0	2	0	2	2
CVP406	Project Pre-work	0	0	4	4	2
CVT406	Railway and Airport Engineering	2	1	0	3	3
	Fluvial Hydraulics					
	Advance Geotechnical Engineering					
CVT450	Hydropower Engineering	2	2	0	4	4
CVT451	Bridge Engineering	3	1	0	4	4
CVP452	Project	0	5	10	15	10
CVT454	Rock Mechanics & Tunneling Technology	2	1	0	3	3
	Transportation Planning & Economics					
	Non-Conventional Energy					
CVT455	Ground Improvement Techniques	3	1	0	4	4
	Earthquake Resistant Design					
	Environment Engineering II					

Table B.2.1.4

2.1.3 State the components of the curriculum (5)

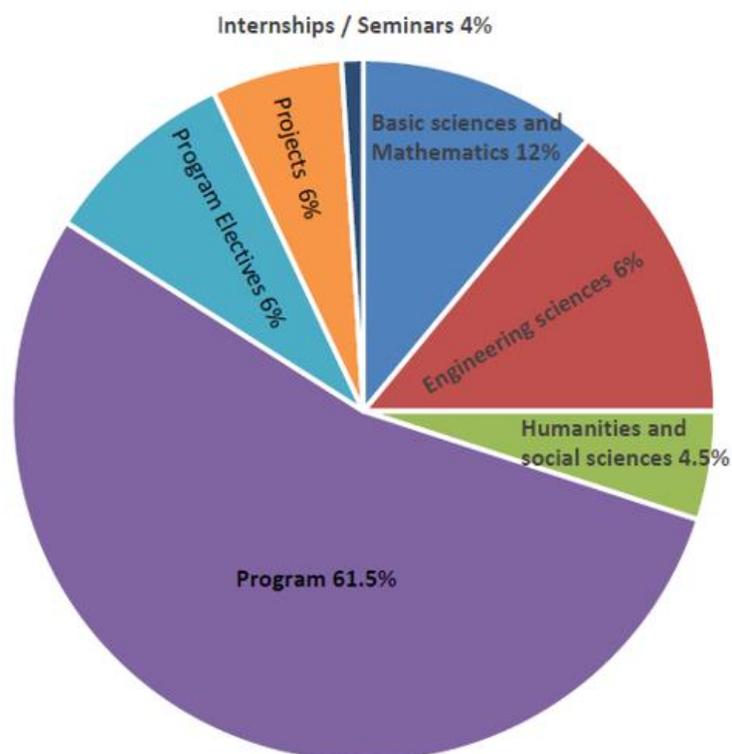
Course Curriculum Scheme - 2016

Course component	Curriculum content (% of total number of credits of the program)	Total number of contact hours/week	Total number of credits	POs	PEOs
Basic sciences and Mathematics	12%	28	24	PO1, PO2, PO3,	PEO1, PEO2, PEO3, PEO4, PEO5, PEO6
Engineering sciences	6%	14	12	PO1, PO2, PO6, PO7	PEO1, PEO2, PEO3, PEO4, PEO5, PEO6
Humanities and social sciences	4.5%	12	9	PO8, PO9, PO10	PEO2, PEO3, PEO6
Program core	61.5 %	145	123	PO1, PO2, PO3,	PEO1, PEO2, PEO3,

Criterion 2

				PO4, PO5, PO, PO7, PO12	PEO4, PEO5, PEO6
Program electives	6%	14	12	PO3, PO5, PO11, PO12	PEO1, PEO2, PEO3, PEO4, PEO6
Project(s)	6%	14	12	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PEO1, PEO2, PEO3, PEO4, PEO5, PEO6
Internships/ seminars	4%	10	8	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PEO1, PEO2, PEO3, PEO4, PEO5, PEO6
<b>Total number of credits</b>			<b>200</b>		

*Table B.2.1.5*



**components of Curriculum Scheme - 2016**

**Pie diagram representation of the Curriculum - 2016:**

*Figure B.2.1.1.b*

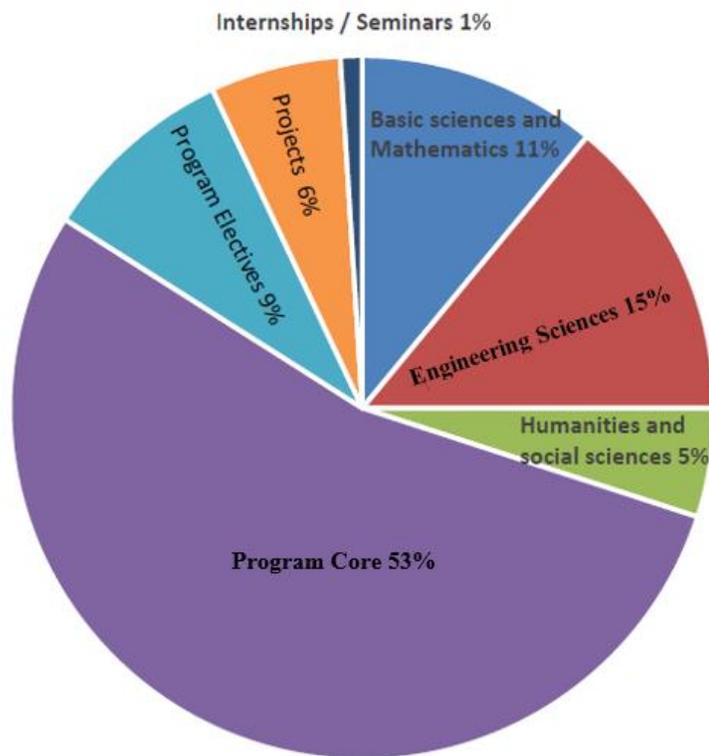
**Course Curriculum Scheme - 2019**

Course component	Curriculum content (% of total number of credits of the program)	Total number of contact hours/week	Total number of credits	POs	PEOs
Basic sciences and Mathematics	11%	24	22	PO1, PO2, PO3,	PEO1,PEO2, PEO3,PEO4, PEO5, PEO6
Engineering sciences	15%	37	29	PO1, PO2, PO6,PO7	PEO1,PEO2, PEO3,PEO4, PEO5, PEO6
Humanities and social sciences	5%	11	10	PO8, PO9,PO10	PEO2, PEO3, PEO6
Program core	53%	128	105	PO1, PO2, PO3, PO4, PO5, PO, PO7, PO12	PEO1,PEO2, PEO3,PEO4, PEO5,PEO6
Program electives	9%	19	19	PO3, PO5, PO11, PO12	PEO1,PEO2, PEO3,PEO4,PEO6

Criterion 2

Project(s)	6%	19	12	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PEO1, PEO2, PEO3, PEO4, PEO5, PEO6
Internships/ seminars	1%	2	3	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12	PEO1, PEO2, PEO3, PEO4, PEO5, PEO6
<b>Total number of credits</b>			<b>200</b>		

Table B.2.1.6



Components of Curriculum Scheme - 2019

Pie diagram representation of the Curriculum - 2019:

Figure B.2.1.1.1c

**2.1.4 State the process used to identify extent of compliance of the curriculum for attaining the program outcomes and program specific outcomes (10)**

*Criterion 2*

- The process that periodically documents and demonstrates how the program curriculum is compiled considering the POs and PSOs.
  - Institute curriculum structure
  - Allocation of hours
  - A planned class engagement schedule
  - A well-defined administrative set-up in the department for monitoring of the implementation of the curriculum
  
- Identification process of the curricular gaps
  - Feedback From:
    - Students
    - Faculty survey
    - Industry survey
    - Alumni
    - Parents

Note: In view of COVID-19 pandemic and other administrative lockdowns in Union Territory of Jammu and Kashmir, the mode of generating feedback from students was changed from offline to online for Autumn 2019 semester onwards. The platform of google forms was utilized by sending the links of each specific form to all students, industry, alumni and other stake holders to collect the different types of feedback data.

**Feedback Forms:**

**1. Alumni Survey**

<b>Civil Engineering Department National Institute of Technology Srinagar Alumni Survey Form</b>		
Thank you for taking the time to fill out this questionnaire. All the information will be kept confidential and will be used only for statistical purposes. As an alumnus, your opinions are valued and are utilized to help us make periodic changes and updates for continuous improvement of our undergraduate program		
<b>Name(optional)</b>		
<b>Year of Graduation</b>		
<b>Mailing address</b>		
<b>Placement</b>	<b>Before/after graduation</b>	<b>Core/Software</b>
<b>Name of the Company</b>		
Please rate each of the following skills, abilities or attributes in terms of their importance to state how well your education at <b>Civil Engineering Department, National Institute of Technology, Srinagar</b> prepared you for these. <b>Write the appropriate number by Using Scale (1 to 3).</b> <b>1= Satisfactory;                      2=Good;                      3=Excellent</b>		
<b>Skills, Abilities and Attributes</b>		<b>Rating</b>
Apply Knowledge of mathematics, Basic sciences and Engineering		
Problem Identification and Analysis		
Design a system and develop solution to the problem		
Investigate and Handle complex problems		
Ability to use techniques and tools in engineering practice		
Understand and appreciate the impact of engineering in the societal and global contexts		
Awareness of existing issues (e.g. Economics of engineering, Environmental issues)		
Understand professional and ethical responsibilities as an engineer (e.g., safety, professional ethics, code of conduct)		
Function effectively in teams		
Proficient in English language in both communicative and technical forms		
Awareness of the need for life-long learning (Seeking further education, self-learning, Membership in professional societies)		
Project Management and Finance		
<b>Signature</b>	<b>Suggestion if any:</b>	

**2. Employer Survey**

<p align="center"><b>Civil Engineering Department National Institute of Technology, Srinagar EMPLOYER SURVEY FORM</b></p>				
<p>The purpose of this feedback is to obtain Employer’s inputs on the quality of education of our undergraduate program. Your sincere cooperation would enable us to improve the quality of our graduates as per your requirements.</p>				
Name of Company/ Organization				
Mailing address				
Sector Private/Public/Academia				
<p>Please rate our Graduates working in your organization using the following criterion. <b>Put tick mark Knowledge, Skills, Abilities, Attitude and other Attributes expected out of NIT Srinagar graduates.</b></p>				
No.	Overall, are you satisfied with	Excellent (3)	Good (2)	Satisfactory (1)
1	Capacity for design and analysis of engineering problems and formulation of appropriate solutions, retaining professional and ethical responsibilities.			
2	Aptitude for self-education and a clear appreciation for the value of life-long learning to update professional knowledge.			
3	Understanding professional engineering solutions for sustainable development and their application in global, national and societal contexts.			
4	Desire and capacity for acquiring new skills and applying them in research and development.			
5	Fundamental knowledge in mathematics and science and professional fluency in English both communicative and writing			
6	Exhibition of management and leadership skills that enable successful function of multi-disciplinary teams.			
Suggestions:				

**Signature:**

**Name and Designation:**

**3. Student Feedback:**

<b>Civil Engineering Department National Institute of Technology, Srinagar Student Feedback Form</b>		
<b>Name(optional):</b>		<b>Year Passed out/studying:</b>
<b>Email(optional):</b>		<b>Phone(optional):</b>
<b>Assessment of Knowledge, Skills, Abilities and Attributes acquired by Students at NIT Srinagar</b>		
Please rate each of the following in terms how well NIT Srinagar inculcated them in you so far, by writing the appropriate number against each by <b>Using Scale (1 to 3).</b> <b>1= Satisfactory;                      2=Good;                      3=Excellent</b>		
<b>S.No.</b>	<b>Attribute</b>	<b>Rating</b>
1	Ability to acquire and apply knowledge of basic mathematics, science and engineering fundamentals.	
2	Ability to apply analytical skills to engineering problems.	
3	Ability to conduct experiments, analyze data, and present results.	
4	Ability to conduct independent research for information required in engineering problem Solving.	
5	Ability to use modern technologies and tools necessary for practice.	
6	Ability to understand global issues related to engineering.	
7	Understand the importance of ethical and professional responsibility.	
8	An ability to function on multi-disciplinary teams.	
9	An ability to communicate effectively.	
10	Recognition of the need for, and an ability to engage in life-long learning.	
	Suggestions for improvement:	

**Signature:**

(a) **Administrative system** of the Department for development and attainment of the Curriculum: The following administrative setup is in place to ensure development and adherence to curriculum and attainment of POs and PSOs:

**1. Programme coordinator and Module coordinators**

The function of Programme Coordinator (i.e., Semester Coordinators for each B.Tech. Semester) and Module Coordinators (usually, Officer I/C various Civil Engineering specializations or their representatives) is to consult various stakeholders for collecting their views about CO's, PEOs and PSOs.

**2. Departmental Faculty Committee (DFB) →**

A committee constituted of all the faculty members of the department to propose and draft the proposals for Course Curriculum, administrative measures for monitoring/moderating of the academic affairs of the department. DFB submits its proposals to Departmental Undergraduate Committee (DUGC) for review and approval. DFB consists of the following members:

- Head of the Department as Chairman
- All faculty members of the department as members.

Further, the DFB reviews the PO/PSO attainments and suggest modifications in the curriculum if needed. The academic proposals approved by DUGC for ratification by Senate Undergraduate Committee (SUGC) are first drafted and proposed in DFB.

**3. Departmental Project Review Committee UG (DPRC)**

This committee is formed at the departmental level for evaluation of the B.Tech student projects in the final 8<sup>th</sup> Semester and consists of the following members:

- Head of Department, Chairperson
- Officer I/Cs of project related Civil Engineering Specializations or his/her representative as faculty member.
- Supervisor of the student as member.
- One external faculty (usually Professor) from sister department as external examiner (member).

**4. Department UnderGraduate Committee (DUGC)**

The DUGC of the Civil Engineering Department consists of

- Head of the Department as Chairman of DUGC.
- Convener (usually a senior Professor) to be nominated by the Departmental Faculty Board (DFB).
- Convener Departmental Post Graduate Committee as member (DPGC)
- Three faculty members to be nominated by the HOD in consultation with Convener DUGC from the Department [incase there are no sufficient faculty members, Chairman Senate may nominate faculty from other departments of the institute).
- One faculty member from other department to be nominated by the HOD in consultation with Convener DUGC.
- External Subject experts from Academia and Industry
- Three student representatives chosen from the undergraduate students of the

department on the basis of highest merit (one each from 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year).

The DUGC Convener shall be nominated by the DFB for a term of two years. The duration of the committee shall be two years. The student members shall not participate when the cases of academic evaluation of the individual students are being considered. Although, students members opinion may be sought prior to taking any decision.

The committee meets as and when required to review the proposals of DFB for curriculum and suggest new courses /modification in course/ bridging of gaps in courses/ value added courses/laboratory courses/up gradations in tune with the department's vision, mission and Program Educational Objectives (PEOs).

Once the curriculum is recommended by the DUGC, it is placed in the Senate of the Institute (with prior ratification by a sub-committee of Senate i.e., Senate Undergraduate Committee, SUGC), which is the highest academic body of the institute. The Senate of the NIT Srinagar is chaired by the Director and comprises of all Professors/ Deans/ HODs of the Institute as members and as per the NIT's Statutes. Other responsibilities assigned to DUGC include the following:

- Attending the problems of students and advising and counselling them in academic matters.
- Policy decisions with respect to all academic matters, including midterm, endterm, project and seminar presentation quality and evaluation.
- To recommend the cases of B.Tech. students for continuation/ extension/ termination/ cancellation of the program.
- Acting as Student Grievance Committee for undergraduate students.
- Any work assigned by SUGC/ Dean-Academic Affairs / Senate.
- Proposing and implementing new courses and programs as approved by Senate / BOG. The proposal of new courses should be recommended by DFB.

The DUGC is expected to have its own meetings regularly and to keep records of its decisions.

### **Program Outcomes and Program Specific Outcomes**

Program outcomes describe what students are expected to know or be able to do by the time of graduation. The program specific outcomes broadly describe the overall capabilities a student is expected to possess at the end of the undergraduate Programme. The program outcomes and program specific outcomes of undergraduate program in civil engineering are as follows:

**Program outcomes and Program Specific Outcomes**

**a) PROGRAM OUTCOMES (POs)**

- PO 1.** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO 2.** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- PO 3.** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO 4.** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems.
- PO 5.** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO 6.** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO 7.** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO 8.** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO 9.** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO 10.** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO 11.** Demonstrate knowledge and understanding of the engineering and management

<p>principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.</p> <p><b>PO 12.</b> Recognize the need for and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.</p> <p style="text-align: center;"><b>Table B.2.1.4a</b></p> <p style="text-align: center;"><b><u>b) PROGRAM SPECIFIC OUTCOMES (PSOs)</u></b></p> <p><b>PSO1.</b> Ability to demonstrate professional engineering approach, including application of principles and utilization of technical resources such as softwares, towards solving technical problems requiring civil engineering interventions.</p> <p><b>PSO2.</b> Ability to furnish and/or analyze designs and construct structural systems, produce related documents, drawings and reports, and present objective estimates of the related quantities.</p> <p><b>PSO3.</b> Ability to conduct field and laboratory investigations pertaining to civil engineering domain and utilize modern engineering tools and techniques.</p>
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**Table B.2.1.4b**

**Alignment of Programme outcomes with Graduate Attributes of NBA**

<b>Programme Outcomes</b>	<b>Graduate Attributes (GAs) Satisfied</b>
<b>PO1:</b> To apply the basic knowledge of contemporary science and technology along with civil engineering fundamentals and essential computational techniques/procedures that aid in solving real life engineering problems.	Engineering knowledge
<b>PO2:</b> To identify, formulate and analyze a complex civil engineering problem supported by literature survey leading to substantial conclusions.	Problem analysis
<b>PO3:</b> To obtain solutions for complex civil engineering problems and design system components/processes keeping in view the appropriate considerations for the public health and safety, society, culture and environment.	Design/ Development of solutions
<b>PO4:</b> To apply systematic approach includes design of experiments, analysis and interpretation of data, and synthesis of the information to investigate a complex civil engineering problem	Conduct investigations of complex problems
using research-based knowledge to obtain reasonable conclusions.	

<b>PO5:</b> To develop and use appropriate state-of-the-art software's and modern IT-based engineering tools/resources for modeling of complex civil engineering problems, duly identifying the limitations.	Modern tool usage
<b>PO6:</b> To utilize the contextual information in order to examine societal, health, safety, legal and cultural issues and identify the consequent responsibilities relevant to the professional engineering practice based on reasoning.	The Engineer and society
<b>PO7:</b> To ensure sustainable development by means of professional engineering solutions in context of the impact on the environment and the society.	Environment and sustainability
<b>PO8:</b> To adhere to professional ethics and norms, and respect human values while practicing the engineering profession.	Ethics
<b>PO9:</b> To perform efficiently as a member or leader of a team or as an individual in diverse work environments	Individual and team work
<b>PO10:</b> To deliberate effectively and clearly on activities related to engineering profession and to comprehend and communicate ideas, interpretations and outcomes of an engineering analysis efficiently in both verbal and printed form.	Communication
<b>PO11:</b> To implement knowledge and understanding of the engineering principles together with efficient management of time and financial resources as a leader or a team member in executing engineering projects.	Project management and finance
<b>PO12:</b> To have inclination to life-long learning through self-education, interaction with stalwarts in the field of civil engineering, participation in professional societies and constantly updating the knowledge regarding recent developments.	Life-long learning

**Table B.2.1.4c**

The above table indicates a strong alignment of the Programme outcomes of the department with the Graduate attributes expected from a civil engineering graduate.

**The correlation between the POs and PEOs.**

The correlation between Program Outcomes and Program Educational Objectives is established in Table below.

**Correlation between POs/ PSOs and PEOs**

<b>Program Outcomes</b>	<b>Program Educational Objectives met through the PO's STRONGLY &amp; VERY STRONGLY</b>
PO1	PEO1; PEO2; PEO4; PEO5; PEO6
PO2	PEO1; PEO2; PEO4; PEO5; PEO6
PO3	PEO1; PEO2; PEO4; PEO5; PEO6
PO4	PEO1; PEO2; PEO4; PEO5; PEO6
PO5	PEO1; PEO2; PEO4; PEO5; PEO6

PO6	PEO2; PEOs3; EO4; PEO6
PO7	PEO1; PEO2; PEOs3; PEO4; PEO6
PO8	PEO1; PEO2; PEOs3
PO9	PEO2; PEOs3
PO10	PEO2; PEOs3
PO11	PEO1; PEO2; PEO6
PO12	PEO1; PEO2; PEO4; PEO5; PEO6
PSO1	PEO1; PEO2; PEOs3; PEO4; PEO5; PEO6
PSO2	PEO1; PEO2; PEOs3; PEO4; PEO5
PSO3	PEO1; PEO2; PEO4; PEO5; PEO6

**Table B.2.1.4d**

The correlation between the two is therefore very strong to strong meaning very satisfactory.

**Contribution of Course Components to the program outcomes**

The broad course components are mapped to POs and PSOs and the results are depicted in TableB.2.1.4e to depict how these help in the attainment of program outcomes.

**Table 2.1.4.5 Mapping of Curriculum components to POs/PSOs**

Curriculum component	Number of credits	POs achieved	Justification for the achievement
Mathematics and Basic Sciences	24	PO1, PO2, PO3	<b>PO1</b> - Basic mathematical and scientific understanding is essential to engineering knowledge <b>PO2</b> - Mathematical understanding is prerequisite to analysis of engineering problems <b>PO3</b> - Helps in mathematical formulation of problems and solutions <b>PSO2</b> - Mathematics is used for data and result analysis
Basic Engineering Courses	12	PO1, PO2, PO6, PO7 PSO1 PSO2 PSO3	<b>PO1</b> - Imparts knowledge of engineering fundamentals. <b>PO2</b> - Provides basic knowhow for Engineering analysis <b>PO6</b> - Help in relating engineering to society and societal issues <b>PO7</b> - Help in achieving sustainable engineering solutions <b>PSO1</b> - Provides basic knowledge of engineering principles <b>PSO2</b> - Develops capability of applying engineering in problem analysis <b>PSO3</b> - Helps in developing laboratory and field engineering skills
HSS	09	PO8, PO9, PO10 PSO2	<b>PO8</b> - Helps in developing professional ethics <b>PO9</b> - Help in developing qualities of planning and cooperation <b>PO10</b> - Equip individuals with efficient communication skills <b>PSO2</b> - Enable individuals to prepare reports, publications, etc.

<p>Professional core including Project/seminars/training/internship</p>	<p>143</p>	<p>PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO12 PSO1 PSO2 PSO3</p>	<p><b>PO1</b> - Provide fundamental knowledge of civil engineering</p> <p><b>PO2</b> - Develop capability of engineering analysis of problems</p> <p><b>PO3</b> - Help in attaining engineering solutions compatible with public health and society</p> <p><b>PO4</b> - Aid in learning design, analysis, interpretation of data and synthesis of information</p> <p><b>PO5</b> - Provide knowledge about availability and usage of modern tools in civil engineering</p> <p><b>PO6</b> - Develop skills to analyze societal, health and other public issues in engineering context</p> <p><b>PO7</b> - Provide capability to incorporate environmental constraints in engineering solutions for sustainability</p> <p><b>PO12</b> – Lifelong learning is motivated.</p> <p><b>PSO1</b> - Study various civil engineering principles in these subjects.</p> <p><b>PSO2</b> - Provide knowledge for analyzing and developing designs</p> <p><b>PSO3</b> - Surveying, mapping and engineering drawing skills are developed</p>
<p>Electives</p>	<p>12</p>	<p>PO3, PO5, PO11, PO12 PSO1 PSO2 PSO3</p>	<p><b>PO3</b> - Study about processes that meet the specified needs</p> <p><b>PO5</b> - Problem specific tools and techniques are learnt</p> <p><b>PO11</b> - Management related subjects can be learnt</p> <p><b>PO12</b> - Motivate individuals towards specific skill enhancement</p> <p><b>PSO1</b> - Provide subject specific technical civil engineering knowledge</p> <p><b>PSO2</b> - Help in developing enhanced skills of design and analysis</p> <p><b>PSO3</b> - Specific skills related to surveying can be learnt</p>

*Table B.2.1.4d*

## 2.2 TEACHING -LEARNING PROCESS (64)

### 2.2.1 Process followed to improve quality of Teaching Learning (14)

#### A. Adherence to academic calendar (2)

#### Academic Calendar Year 2020

Month	Activities Planned
<b>March</b>	Registration B.Tech. (Spring 2020 session) Commencement of classes Registration for P.G and PhD (Spring 2019 session) Registration B.Tech. Even Semesters, M. Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. (Spring 2019 session) Registration with late fee B.Tech., M. Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. (Spring 2020 session) Commencement of Classes Registration of P.G and Ph. D
<b>April</b>	Sports Week
<b>May</b>	Mid Term Examination Advertisement for admission to (a) M. Tech (sponsored), (b) Ph. D B.Tech. Project Viva-voce and Practical Examination
<b>June</b>	B.Tech. 8 <sup>th</sup> semester End Term Examination UG, PG and Ph. D End Term Examinations Registration of Supplementary Exam. (Even Semester) Registration of Supplementary Exam. (Odd Semester)
<b>July</b>	Supplementary Examinations for odd semester; Registration for U.G./ P.G. / Ph.D. (Autumn 2020);
<b>August</b>	Registration with late fee Commencement of classes Fresher's Orientation Day
<b>September</b>	Techvaganza Mid-Term Examination ;
<b>October</b>	Convocation 18 Feb 2021 National Entrepreneurship Day Registration of Supplementary Exam. (Odd Semester)
<b>November</b>	End Semester Examinations

	Registration for Supplementary Exam. (Even Semester) Supplementary Examination for Even Semester
<b>December</b>	Supplementary Examination for Even Semester; Winter Vacations for students

**Table B.2.2.1a****Adherence Report 2020**

<b>SPRING-2020</b>				<b>Adherence</b>	<b>Remark</b>
<b>S. No.</b>	<b>Activity</b>	<b>Date</b>			
		<b>From</b>	<b>To</b>		
1.	Registration for U.G. 2 <sup>nd</sup> Semester	09-03-2020	11-03-2020	Yes	Executed on Date
	Commencement of classes of U.G. 2 <sup>nd</sup> Semester	12-03-2020		Yes	Executed on Date
	Registration for U.G. 4 <sup>th</sup> Semester	12-03-2020	13-03-2020	Yes	Executed on Date
	Commencement of classes of U.G. 4 <sup>th</sup> Semester	16-03-2020		Yes	Executed on Date
	Registration for U.G. 6 <sup>th</sup> Semester	16-03-2020	17-03-2020	Yes	Executed on Date
	Commencement of classes of U.G. 6 <sup>th</sup> Semester	18-03-2020		Yes	Executed on Date
	Registration for U.G. 8 <sup>th</sup> Semester	09-03-2020	11-03-2020	Yes	Executed on Date
	Commencement of classes of U.G. 8 <sup>th</sup> Semester	12-03-2020		Yes	Executed on Date
	Registration for P.G. & PhD	09-03-2020	11-03-2020	Yes	Executed on Date
	Commencement of classes of P.G. & PhD	12-03-2020		Yes	Executed on Date
2.	Registration with late fee @ Rs.400/=per day	Applicable after 5 <sup>th</sup> day of Registration		Yes	Executed on Date
3.	Sports week	11-04-2020	13-04-202	Suspended	Due to spread of COVID-19 Pandemic
4.	Mid-Term examination	04-05-2020		Suspended	Due to spread of COVID-19 Pandemic
5.	Advertisement for admission to: a) M. Tech (sponsored category) b) Ph. D	Last Week of May		Suspended	Due to spread of COVID-19 Pandemic
<b>End-Term Examinations</b>					
6.	B. Tech Project viva-voce Exam	Last week of May,2020		Postponed	Due to spread of COVID-19 Pandemic
	B. Tech 8 <sup>th</sup> Semester	10-06-2020	13-06-2020	Postponed	Due to spread of COVID-19 Pandemic
	Registration for Supplementary Examinations with Regular candidates	03-06-2020 to 07-06-2020		Postponed	Due to spread of COVID-19 Pandemic

Criterion 2

	B. Tech. 2nd, 4 <sup>th</sup> & 6 <sup>th</sup> M. Tech /M.Sc. 2nd & 4th semesters and Ph.D.	From 10-06-2020		Postponed	Due to spread of COVID-19 Pandemic
7.	Registration for Supplementary Examinations (Odd Semester)	15-06-2020 to 26 -06-2020		Postponed	Due to spread of COVID-19 Pandemic
8.	Supplementary Examinations for odd Semesters	From 05-07-2020		Postponed	Due to spread of COVID-19 Pandemic
9.	Registration for Special Supplementary Exam for 8th Semester	01-06-2019 to -2019		Postponed	Due to spread of COVID-19 Pandemic
<b>Autumn-2020</b>					
<b>Registration &amp; Commencement of Classes</b>					
1.	Registration for U.G.,P.G.& Ph.D.	29-07-2019	01-08-2019	Yes	Executed on Date
	Registration with late fee @ Rs.400/=per day	Up to 05-08-2019		No	Relaxed due to abrogation of Article 370 in J&K
	Commencement of classes	01-08-2019		No	Postponed due to abrogation of Article 370 in J&K. Classes commenced from 11 Nov, 2019.
2.	Fresher's Orientation day	20-08-2019		Postponed	Held on 15 Nov, 2019
3.	Sports Event	06-09-2019	08-09-2019	Suspended	Due to abrogation of Article 370 in J&K
4.	Midterm Examinations	16-09-2019		Suspended	Due to abrogation of Article 370 in J&K
5.	Convocation	28-09-2019		Deferred	Due to abrogation of Article 370 in J&K
6.	National Entrepreneurship Day	09-11-2019		Deferred	Due to abrogation of Article 370 in J&K
<b>End-Term Examinations</b>					
7.	Practical Examinations	1 <sup>st</sup> week of November		Postponed	3 <sup>rd</sup> week of December
8.	Registration for Supplementary Examinations with Regular candidates	01-11-2019 to 07-11-2019		Yes	
9.	End Semester Examinations	From 11-11-2019		Postponed	25-02-2020
10.	Registration for Supplementary Examinations (Even Semester)	20-11-2019 to 28-11-2019		Yes	
11.	Supplementary Examinations for Even Semesters	From 01-12-2019		Postponed	16-03-2020
12.	Winter Vacations for Students	10-12-2019		Yes	Executed on Date

**Table B.2.2.1b**

**Academic Calendar Year 2019**

Month	Activities Planned
<b>February</b>	Registration B.Tech. (Spring 2019 session) Commencement of classes Registration for P.G and PhD (Spring 2019 session) Registration B.Tech. Even Semesters, M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. (Spring 2018 session) Registration with late fee B.Tech. , M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. (Spring 2019 session) Commencement of Classes
<b>March</b>	Extra-Curricular Activities – 5-day workshop on Project Planning
<b>April</b>	Mid-Term examinations TECHVAGANZA
<b>May</b>	Advertisement for admission to M.Tech (sponsored) , Alumni Visit: Practical Examinations; Advertisement for PH.D. admissions; End Semester Examination B.Tech. 8 <sup>th</sup> Semester
<b>June</b>	B.Tech. Project Viva-voce Examination Registration for Supplementary examinations End Semester Examination B.Tech. 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup> Semesters, M.Tech. /M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. Summer breaks for students
<b>July</b>	Supplementary Examinations for odd semester; Special Supplementary Examinations for 8 <sup>th</sup> Semester; Registration for U.G./ P.G. / Ph.D. (Autumn 2019);
<b>August</b>	Commencement of classes; Registration with late fee Fresher's Orientation Day
<b>September</b>	Extra-Curricular Activities – Sports Event; Mid-Term Examination ; Convocation
<b>October</b>	Celebration of Rashtriya Ekta Diwas; Run for Unity; National Innovation Day
<b>November</b>	National Entrepreneurship Day; Practical Examinations; End Semester Examinations; Registration for Supplementary Examination for Even Semester
<b>December</b>	Supplementary Examination for Even Semester; Winter Vacations for students

*Table B.2.2.1c***Adherence Report 2019**

SPRING-2019				Adherence	Remark
S. No.	Activity	Date			
		From	To		
1.	Reopening of Institute for Faculty	18-02-2019		Yes	Executed on Date
	Registration for U.G. , P.G & Ph.D.	18-02-2019	22-02-2019	Yes	Executed on Date

Criterion 2

	Registration with late fee @ Rs.400/=per day	25-02-2019	28-02-2019	Yes	Executed on Date
	Commencement of classes	Up to 25-02-2019		Yes	Executed on Date
2.	Mid-Term Examinations	18-04-2018		Yes	Executed on Date
3.	Techvaganza	27-04-2019 & 28-04-2019		Yes	
4.	Advertisement for admission to: c) M. Tech (sponsored category) d) Ph. D	3rd Week of May		Yes	Executed on Date
<b>End-Term Examinations</b>					
5.	B. Tech 8 <sup>th</sup> Semester	From 23-05-2019		Yes	Executed on Date
	B. Tech Project viva-voce Exam	10-06-2019 13-06-2019		Yes	Executed on Date
	Registration for Supplementary Examinations with Regular candidates	03-06-2019 to 07-06-2019		Yes	Executed on Date
	B. Tech. 2nd, 4 <sup>th</sup> & 6 <sup>th</sup> M. Tech /M.Sc. 2nd & 4th semesters and Ph.D.	From 10-06-2019		Yes	Executed on Date
6	Registration for Supplementary Examinations (Odd Semester)	24-06-2019 to 02-07-2019		Yes	Executed on Date
7.	Supplementary Examinations for odd Semesters	From 04-07-2019		Yes	Executed on Date
8.	Registration for Special Supplementary Exam for 8th Semester	01-07-2019 to 11-07-2019		Yes	Executed on Date
9.	Special Supplementary Examinations for 8 <sup>th</sup> Semester	From 15-07-2019		Yes	Executed on Date
10.	Summer Break	23-06-2019	28-07-2019	Yes	Executed on Date
<b>Autumn-2019</b>					
<b>Registration &amp; Commencement of Classes</b>					
1.	Registration for U.G.,P.G.& Ph.D.	29-07-2019	01-08-2019	Yes	Executed on Date
	Registration with late fee @ Rs.400/=per day	Up to 05-08-2019		No	Relaxed due to abrogation of Article 370 in J&K
	Commencement of classes	01-08-2019		No	Postponed due to abrogation of Article 370 in J&K. Classes commenced from 11 Nov, 2019.
2.	Fresher's Orientation day	20-08-2019		Postponed	Held on 15 Nov, 2019
3.	Sports Event	06-09-2019	08-09-2019	Suspended	Due to abrogation of Article 370 in J&K
4.	Midterm Examinations	16-09-2019		Suspended	Due to abrogation of Article 370 in J&K

Criterion 2

5.	Convocation	28-09-2019	Deferred	Due to abrogation of Article 370 in J&K
6.	National Entrepreneurship Day	09-11-2019	Deferred	Due to abrogation of Article 370 in J&K
<b>End-Term Examinations</b>				
7.	Practical Examinations	1 <sup>st</sup> week of November	Postponed	3 <sup>rd</sup> week of December
8.	Registration for Supplementary Examinations with Regular candidates	01-11-2019 to 07-11-2019	Yes	
9.	End Semester Examinations	From 11-11-2019	Postponed	25-02-2020
10.	Registration for Supplementary Examinations (Even Semester)	20-11-2019 to 28-11-2019	Yes	
11.	Supplementary Examinations for Even Semesters	From 01-12-2019	Postponed	16-03-2020
12.	Winter Vacations for Students	10-12-2019	Yes	Executed on Date

*Table B.2.2.1d*

**Academic Calendar Year 2018**

Month	Activities Planned
<b>February</b>	Registration B.Tech. 8 <sup>th</sup> Semester (Spring 2018 session) Commencement of classes for B.Tech. 8 <sup>th</sup> Semester Registration with late fee B.Tech. 8 <sup>th</sup> Semester (Spring 2018 session) Registration B.Tech. 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup> Semesters, M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. (Spring 2018 session)
<b>March</b>	Registration with late fee B.Tech. 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup> Semesters, M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D. (Spring 2018 session) Commencement of classes for B.Tech. 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup> Semesters, M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D.
<b>April</b>	Mid-Term exam B.Tech. 8 <sup>th</sup> Semester Mid-Term exam B.Tech. 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup> Semesters, M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D.; Alumni Meet-2018; Extra-Curricular Activities
<b>May</b>	Annual Day; Practical Examinations; Advertisement for PH.D. admissions; End Semester Examination B.Tech. Semester
<b>June</b>	B.Tech. Project Viva-voce Examination End Semester Examination B.Tech. 2 <sup>nd</sup> , 4 <sup>th</sup> and 6 <sup>th</sup> Semesters, M.Tech./M.Sc. 2 <sup>nd</sup> and 4 <sup>th</sup> and Ph.D.
<b>July</b>	M.Tech. Dissertation Viva-voce Exam; Supplementary Examinations for odd semester; Summer Break; Special Supplementary Examinations for 8 <sup>th</sup> Semester; Registration for U.G./ P.G. / Ph.D. (Autumn 2018); Commencement of classes; Registration with late fee
<b>August</b>	Fresher's Orientation Day
<b>September</b>	Extra-Curricular Activities; Mid-Term Examination; Convocation Alumni Meet Delhi Chapter
<b>October</b>	Tech. Fest/ ECA

	National Innovation Day
<b>November</b>	Practical Examination; National Entrepreneur Day End Semester Examination; Supplementary Examination for Even Semester
<b>December</b>	Winter Vacations for students

Table B.2.2.1e

## Adherence Report 2018

ACTIVITY	Date		Adherence	Remark
	From	To		
<b>REGISTRATION</b>				
<b>B.Tech. 8th semester</b>	19-02-2018	21-02-2018	Yes	Executed on Date
<b>Registration with late fee @ Rs. 400/= per day</b>	Up to 26-02-2018		Yes	Executed on Date
<b>B.Tech.. 2<sup>nd</sup> 4<sup>th</sup> &amp; 6<sup>th</sup> semesters and M.Tech./ M.Sc. 2<sup>nd</sup> &amp; 4<sup>th</sup> and Ph.D.</b>	26-02-2018 to 28-02-2018		Yes	Executed on Date
<b>Registration with late fee @ Rs. 400/= per day</b>	Up to 05-03-2018		Yes	Implemented
<b>COMMENCEMENT OF CLASSES</b>				
<b>Commencement of Classes for B. Tech.. 8<sup>th</sup> semester</b>	22-02-2018		Yes	Executed on Date
<b>Commencement of Classes for B.Tech.. 2<sup>nd</sup> &amp; 4<sup>th</sup> , 6<sup>th</sup> semesters and M.Tech./ M.Sc. 2<sup>nd</sup> &amp; 4<sup>th</sup> and Ph.D.</b>	01-03-2018		Yes	Executed on Date
<b>Extra-Curricular Activities</b>	28-04-2018 to 30-04-2018		Yes	Executed on Date
<b>Alumni meet-2018</b>	28-04-2018 to 29-04-2018		Yes	Executed on Date
<b>B.Tech.. 8<sup>th</sup> Semester</b>	16-04-2018 to 21-04-2018		Yes	Executed on Date
<b>B.Tech.. 2<sup>nd</sup>, 4<sup>th</sup> &amp; 6<sup>th</sup>; M.Tech./M.Sc. 2<sup>nd</sup> &amp; 4<sup>th</sup> semesters and Ph.D..</b>	23-04-2018 to 28-04-2018		Yes	Executed on Date
<b>ANNUAL DAY</b>	01-05-2018		Deferred	Lock down
<b>PRACTICAL EXAMINATIONS</b>				
<b>B.Tech.. Project viva-voce Exam</b>	11-06-2018 to 12-06-2018		Yes	Executed on Date
<b>M.Tech. Dissertation Viva-voce Exam</b>	1 <sup>st</sup> week of July-2018		Yes	Executed on Date
<b>END SEMESTER</b>				

Criterion 2

<b>B.Tech.. 8<sup>th</sup></b>	28-05-2018	Yes	Executed on Date
<b>B.Tech.. 2<sup>nd</sup>, 4<sup>th</sup>&amp; 6<sup>th</sup>; M.Tech. / M.Sc. 2<sup>nd</sup>&amp; 4<sup>th</sup> semesters and Ph.D.</b>	19-06-2018	Yes	Executed on Date
<b>Advertisement for Ph.D. admissions</b>	Last week of May-2018	Yes	Executed on Date
<b>Supplementary Examinations for odd semester</b>	From 02-07-2018	Yes	Executed on Date
<b>Summer Break</b>	10-07-2018   22-07-2018	Yes	Executed on Date
<b>Special Supplementary Examinations for 8th semester</b>	16-07-2018	Yes	Executed on Date
<b>Registration for U.G., P.G. &amp; Ph.D.</b>	<b>23-07-2018 to 25-07-2018</b>	Yes	Executed on Date
<b>Registration with late fee @Rs 400/= per day</b>	Up to 30-07-2018	Yes	Executed on Date
<b>Commencement of classes</b>	26-07-2018	Yes	Executed on Date
<b>Extracurricular activity</b>	07-09-2018 to 15-09-2018	No	Deferred due Prevailing condition
<b>Midterm examination</b>	10-09-2018 to 15-09-2018	Postponed one week	17-09-2018 to 22-09-2018
<b>Convocation</b>	22-09-2018	Yes	Executed on Date
<b>Alumni meet Delhi chapter</b>	29-09-2018 to 30-09-2018	Yes	Executed on Date
<b>Practical examination</b>	1st week of November	Yes	Executed on Date
<b>National Entrepreneur day</b>	09-11-2018	Yes	Executed on Date
<b>End semester examination</b>	From 12-11-2018	Yes	Executed on Date
<b>Supplementary examinations for even semester</b>	From 26-11-2018	Yes	Executed on Date
<b>Winter vacation for students</b>	10-12-2018	Yes	Executed on Date

*Table B.2.2.1f*

## **B. Pedagogical initiatives (2)**

### **B.1 Real time examples**

- To demonstrate the complexity and unpredictability of real issues, and to stimulate critical thinking real world examples are discussed.
- Inter- and multi-disciplinary approaches are used for problem solving.
- In order to demonstrate that there is no perfect solution to a particular problem real world problems are invoked.
- Real world examples help students think more analytically about the solutions.

### **B.2 Interactive classrooms**

Classes are made more interactive by encouraging student participation as follows:

- Asking students to elaborate something they have written in a response paper or on the class' discussion board.
- Having students to answer other students' questions.
- Punctuating the lecture with questions.
- Interrupting the lecture with a sample exam question.
- Asking students to interpret a statistic, a graph, a chart, or another visual image.
- Integrating a case study or an inquiry or a problem solving exercise into the class.
- Integrating student presentations into the class.
- Asking questions that involve higher-order thinking skills like diagnostic, challenge, evaluation or prediction questions.
- Asking students to summarize the main points that they learned in class that day and the points they found most confusing.
- Asking the students to explain the relevance, utility, or significance of the information presented in the class.

### **B.3 Slide Presentation**

Slide presentation is used to benefit the students by engaging in multiple learning styles, increasing visual impact, improving audience focus and providing annotations and highlights.

### **B.4 Video Lectures**

Video lecturer are imparted that are archived and can be accessed anytime anywhere. For certain topics and concepts video can be used by the novice students who have lower knowledge to process the concepts. Almost 50% of the lectures halls are fitted with LCD projectors for facilitate this initiative.

### **B.5 Collaborative learning**

#### **Theory subjects and Lab:**

Classes for theory /tutorial and labs are conducted as per well notified Time-table issued by the time table I/C of the department under the signatures of the HOD.

- For lab classes Groups comprising a maximum of five to six students are formed and

each group is given experiment for conduct as per the syllabus of the lab by the faculty and asked to submit a report. Prior to this demonstration is given for the experiment and lab manuals are provided in the lab. For every experiment.

- A class representative is nominated by the co-coordinator of each class for maintaining communication with students.
- An assessment on the reports submitted by the students is done by the faculty to analyse the expected outcome from the activity is achieved.
- The tasks assigned could be from one to three in each semester as decided by the faculty member depending on the course.
- The focus of the tasks is on learning new technologies, enhance the knowledge on a particular topic, studying new tools to be in pace with the industry, doing some mini projects, etc.
- During the Covid-19 pandemic, for Spring 2020, all theory classes were conducted using online platforms. The course teachers taught using different platforms including ZOOM, google meet, Webexin, Microsoft Teams, etc. The student WhatsApp groups were formed for easy communication and weekly course assignments were given using google classrooms.
- For each course, class notes and other materials were also uploaded in the google classroom and on institute website for student's easy accesses.

### **B.6 Group Discussion**

Group Discussions is an excellent strategy for enhancing student motivation, fostering, intellectual agility and encouraging democratic habits. It create opportunities for students to practice and to sharpen a number of skills including the ability to articulate and defend positions, consider different points of view, and enlist and evaluate evidence. The group discussions are promoted in the theory and lab classes.

### **B.7 Assignments**

The purpose of the writing assignments is to help each student develop research and communication skills so they obtain the necessary information literacy skills to complete the engineering curriculum.

Writing assignments is a flexible means of demonstrating learning as well as a method of exploring one's thinking to stimulate learning. The civil engineering department strictly follows this method

- A minimum of two assignments is given for each course in a semester.
- The assignment given could be theoretical or a practical implementation.
- The assignments are designed so that the COs, POs and PSOs are covered in the questions asked in the assignments.
- In view of Covid-19 pandemic and other administrative lockdowns in the UT of Jammu and Kashmir, for Autumn 2019 semester onwards all course assignments including video demonstrations for laboratory assignments uploaded in Google classroom and institute website for the easy access to students.

### **B.8 Conducting Quiz**

- Quizzes are conducted for all courses in all semesters.
- At least one quiz competition is held per course in a semester.
- Faculty keeps a document of the quiz questions.
- The mode of conducting quiz is oral and in the class.
- Quiz Competitions are organized to promote scholastic excellence and to provide a venue for interaction amongst students.

### **B.9 Tutorials**

Tutorials are generally intended to

- Enables the students to pursue their individual academic interests within the context of the subject.
- Helps the students to gain a deep understanding of the subject matter.
- Develop students' ability to think and act like a professional in their discipline.
- Develop students' basic academic skills like identification and evaluation of relevant resources, effective communication, effective time-management etc.
- For each subject, at least one hour in every week is allotted for conducting tutorial as shown under the heading "Structure of Curriculum" above.
- A tutorial register is maintained for each subject and regularly maintained by the concerned faculty.

### **B.10 Self-Learning Facility**

The self-learning facilities provided in the institute are:

- A Common Computing Centre equipped with more than 100 computers is available 12 hours per day with high-speed internet facility.
- A departmental computer lab equipped with 50 computers having necessary system and application software's is available for students to carry out their work.
- A Central Library with an excellent collection of Books, Journals, Technical magazines, Newspapers and non-book materials in engineering and technology, science, humanities and management like CD-ROM's are available.
- The digital library provides IP enabled access to a large number of full texts on line journal databases from the various publishers such as Science direct etc.

### **B.11 Co-curricular Activities**

#### **Lectures/ Seminars**

- Eminent personalities are invited (visiting) from field deliver lectures articulating their thoughts and elaborating on their well-known works.

### **B.12 Class Assessment**

The performance of students' is made through surprise vive-voce to improve regularity of students in class and reading.

### **B.13 Industrial Training and Industrial Visits**

The objectives of the industrial training is to expose the students to the engineering practice which is specific to their course specialization and to expose the students to

## Criterion 2

the responsibility of an engineer and the engineering profession to develop the students' communication skills that include daily interaction within the working environment and technical writing.

- The students of the civil engineering department are deputed to very important infrastructure projects for undergoing industrial training of minimum 6 weeks, at 5th and 6th semester levels.
- The same is evaluated at the end of 7th semester.
- In addition, the students have several industrial visits depending upon faculty members.

### **B.14 Exhibitions**

- Project exhibitions are encouraged during programs of technical festivals such as TECHVAGANZA etc. organized by NIT Srinagar.
- Students are encouraged to take part in exhibitions conducted by various organizations so that their innovative ideas are made known to the public.

### **C. Methodologies to support weak students and encourage bright students (02)**

- The students scoring above 75% marks are grouped as bright students and measures are taken to encourage these bright students.
- The measures taken include the following and additional actions may be added according to the requirement:
  - Provided details of advanced books to be referred.
  - Suggest e-resources and journals.
  - Exposure new tool/ software.
  - Encouraged to take additional mini-projects
  - Allowed to engage a class on a particular day
- Bright students are asked to help weak students to boost their morale.
- Prepare quiz on topics from the subject.

### **Assistance to weak students**

- The students who scored less than 50% marks are grouped as weak students.
- Remedial classes are conducted for the weak students by faculty.
- The number of hours taken for remedial classes is decided by the faculty as required.
- Remedial tests are conducted for the weaker students thereafter and the results are analyzed to identify the impact of the remedial classes.
- Additional measures are taken by the respective faculty in cases where the students fail to achieve the objective of remedial classes.

### **D. Quality of classroom teaching (Observation in a class) (2)**

In order to facilitate the better classroom teaching the faculty members arrange the students in a classroom in such a way that the weaker students are constantly being monitored by the faculty member. It is always ensured that a weaker student is seated

with a bright student. The classification of weaker and bright students is based on the grades in the previous semesters and mutual consultation of the faculty members. There is constant interaction between the students and the faculty in a class. The faculty members encourage the students to interrupt the teacher during the lecture for asking questions. The relevance and the depth of the question help the faculty to assess the quality of the students and also the interest of the students in acquiring the knowledge. It consists of:

- A Faculty member stops during the lecture and asks questions regarding the topics which the faculty was discussing previously in the classroom. This ensures that the students remain attentive during the delivery of the lecture.
- The weaker students are frequently asked to repeat what the faculty is teaching in that particular class so that the students constantly maintain the rough notebook in the classroom.
- The faculty member would make rounds in the classroom so that the lectures are recorded by the students in the classroom.
- Numerical problems in the classroom are assigned to the students, group wise. Each group is monitored so that a healthy atmosphere of discussion among the students is initiated to solve the problems.

**E. Conduct of experiments and continuous assessment in the laboratory  
(Observation in a Lab) (2)**

- A lab manual is maintained in each laboratory.
- Each laboratory include three types of experiments:
  - Experiments in the prescribed syllabus.
  - Experiments that cover advanced topics.
  - Open-ended Experiments.
- All the experiments in the prescribed syllabus are compulsorily followed and completed by the end of the semester.
- Students should complete at least two or three experiments that cover the advanced topics in each laboratory.
- Open-ended Experiments could be assigned by the faculty or the students may choose an experiment on their own to be completed in the laboratory.
- The objective and the procedure for all experiments in the prescribed syllabus and is available in the lab manual.
- The solution along with the objective and the procedure are added to the lab manual for the experiments that cover advanced topics.
- Groups comprising a maximum of five to six students are formed in each class.
- One from the group is designated as the group leader.
- Each group may be assigned tasks by the faculty and a report on the activity is provided by the respective group leader.
- Every student maintains a rough record to record the details of work done in each laboratory session.

## *Criterion 2*

- The students are directed to write the step by step procedure to achieve a solution for the given experiment.
- The faculty-in-charge checks the procedure and then students can proceed with doing the experiment.
- Student should record the observations in the rough record while doing the experiment.
- Students may also analyse the data to plot graph or other related work.
- The final output is verified by the faculty-in-charge.
- Students should add the details of the experiments done in the laboratory to the prescribed record book.
- Students can appear for the Practical Examination only if the record is certified by the faculty-in-charge.
- In view of Covid-19 Pandemic and other administrative lockdown in UT of Jammu and Kashmir, from Autumn 2019 all lab. sessions were conducted online; the recorded lab experiments were uploaded in the google classroom and institute website for easy access to students.

### **F. Continuous Assessment in the Laboratory (2)**

The students are asked questions about the previous lab classes and small class tests are conducted frequently besides the discussion on and evaluation of the Lab notebooks prepared and maintained by the students.

### **G. Students feedback of teaching learning process and action taken (1)**

#### **Student's feedback**

- It is a valuable for identifying areas for instructional improvement.
- The feedback is taken at the end of each semester.
- The HOD provides the suggestions for improvement based on the feedback of the students wherever needed. The format of the student feedback follows:

**COURSE APPRAISAL/ FEEDBACK FORM**

COURSE NO & TITLE:

DATE:

FACULTY NAME:

SEM:

PLEASE TICK IN THE APPROPRIATE BOX

S. No.	Course Organization	5	4	3	2	1
1	Were the objectives and course plan clearly specified?					
2	Was the course coverage and depth adequate?					
3	Did the topics provide any new knowledge?					
4	Was the prescribed study material readily available?					
<b>Presentation and Interaction</b>						
5	How were the lectures in terms of clarity and presentation of the fundamental concepts?					
6	Rate the audibility and articulation of the instructors oral presentation					
7	Did the instructor encourage think logically and objectively?					
8	Was the instructor's response to the questions asked in the class satisfactory?					
9	Rate the instructor's attitude towards teaching of this course.					
10	Were the classes held regularly and on time?					
11	Rate the overall quality of teaching in this course					
<b>Evaluation</b>						
12	Did the examinations reflect the courses plan?					
13	Were the examinations of appropriate level and length?					
14	Were the answer script promptly checked and returned?					
15	Was the grading fair and transparent?					
16	Did the midterm evaluation improve the understanding of this course?					

5=Excellent; 4=V. good; 3=Good; 2= Average and 1= Just satisfactory

Would you rate this course as one of the five best courses you have had so far? Yes/ no  
If you have any further comments not covered by this questionnaire, please write below.

- In view of COVID-19 pandemic and administrative lockdown in the UT of Jammu and Kashmir, the mode of collecting student feedback was changed from offline to online from Autumn 2019 semester onwards. The platform of google forms was utilized by sending the hyper-links of each specific form to all students and hence the data was gathered therefrom.

### **Feedback analysis**

The feedback forms are collected and are deliberated by a designated committee comprising HOD, a Professor, an Associate Professor and an Assistant Professor nominated by the HOD. Depending upon the feedback, the HOD communicates the feedback to the respective faculty member who comes to know about their strengths and deficiencies and gives them a chance to enhance their teaching skills. The HOD gives necessary suggestions, guidance and advice for the areas where improvement is needed. The feedback remains strictly confidential between the HOD and the concerned faculty members so that the morale of the faculty does not get affected.

### **2.2.2 Quality of end semester examination, internal semester question papers, assignments and evaluation (14)**

#### **A. Process for internal semester question paper setting and evaluation and effective process implementation (3)**

- **To ensure the quality of the internal semester question papers the following process is adopted**
  - Regular midterm exams are held in strict adherence to the academic calendar of the institute.
  - The question papers are set in such a way that the COs maps the questions asked.
  - The question papers are examined and verified by the HOD to ensure the standard of the paper and ensures that the COs of the course are covered. The questions papers are modified if HOD is not satisfied with standard requirements of the question paper.
  - The questions asked are well balanced to ensure that all the components such as knowledge, comprehension, application, analysis etc. are encompassed.
  - Due to online mode of teaching-learning owing to COVID-19 Pandemic and administrative lockdown in the UT of Jammu and Kashmir, the midterm and end-term examinations from Autumn-2019 were conducted using online MCQ / descriptive type questions. The midterm exam was reduced from 90 minutes to 30 minutes for MCQ type.
  
- **To ensure the quality of the assignments following procedure is adopted**
  - At least two assignments are given before midterm and after the midterm (before the commencement of the major exam)
  - The assignments are designed to map the COs of the course.
  - The assignments are designed to cover both theoretical and numerical portion of the course.
  - The assignment s covers knowledge, comprehension, application, analysis etc. of the course.
  - The assignments may have questions designed by the faculty or an open book type.
  - The evaluated assignments are returned to the students with the remarks of faculty so as to point out the mistakes.
  - The marks earned by the students are displayed on the notice board for transparency so that the students come to know about the marks before final submission to the controller of examinations.

- **To ensure the quality of evaluation following procedure is place in the department**
  - The scheme of evaluation and solution to the problems in the question papers are prepared by the respective faculty in advance.
  - The CO coverage and the marks allotted are recorded by the faculty. The
  - The evaluated answer books are returned by the faculty to the students. The Students feedback is received by the faculty regarding the evaluation of each question.
  - The students are encouraged to discuss any doubt or discrepancy regarding the evaluation.
  - The marks of the students are forwarded only when the students are satisfied with evaluation.
  - It is the statutory procedure of the institute to show the evaluated answer books to the students, once the students give in writing the that they have seen the answer books. The marks are forwarded to the concerned quarters.
  
- **To ensure the quality of the internal semester question papers, the following process is adopted:**
  - Regular midterm exams are held in strict adherence to the academic calendar of the institute.
  - The question papers are set in such a way that the COs map with the questions asked.
  - The question papers are examined and verified by the HOD to ensure the standard of the question paper and ensures that the COs of the course are covered. The questions papers are modified if HOD is not satisfied with standard requirements of the question paper.
  - The questions asked are well balanced to ensure that all the components such as knowledge, comprehension, application, analysis etc. are encompassed.
  - To ensure the quality of evaluation, following procedure is in place in the department
  - The scheme of evaluation and solution to the problems in the question papers are prepared by the respective faculty in advance.
  - The CO coverage and the marks allotted are recorded by the faculty.
  - The evaluated answer books are returned to the students by the faculty after evaluation, both in midterm and major exam. The students are encouraged to discuss any doubt or discrepancy regarding the evaluation.
  - The marks of the students are forwarded to the academic & examination section only after the students are satisfied with evaluation.
  - No student is left without seeing his evaluated answer books.

**B. Process to ensure questions from outcomes/ learning level perspective (01)**

- For each subject, a tentative question list is prepared according to the COs.
- While setting the question paper, previous institute exam papers of at least three years are taken into consideration to avoid repetition of questions.
- While setting a question papers an attempt is made to follow Bloom's taxonomy. The questions are prepared according to the level of toughness (viz., analysing the problems, implementation of modern tools, formulating the problems etc.).

**The questions asked are of three categories:**

- Questions of elementary level and can be answered by an average student, which require fundamentals of the course.
- Questions that need analysis and use of content covered as per syllabus.

## Criterion 2

- A few questions are based on advanced level. The solution of these questions/problems require certain amount of critical thinking, analysis and knowledge.

### **C. Evidence of COs coverage in class test / mid-term tests (5)**

- All class test and mid-term test papers cover all topics relevant to COs.
- A record of all class tests / mid-term tests / end semester test is maintained and submitted to the HOD for his perusal to ensure that all the topics are covered in these exams.
- A HOD/faculty member ensures that the questions asked previously (midterm) are not repeated so that major portions of COs are covered.
- All the faculty members are compulsorily required to maintain a question paper file (soft and hard copy) where all the question papers are saved so that question paper for end term is set without repeating of any question from midterm. This scheme helps to prevent repetition of questions and coverage of maximum COs.

### **D. Quality of assignments and its relevance to COs (5)**

- Assignment issue and submission dates are announced by the respective faculty members.
- A minimum of two assignments are given for each subject.
- To ensure the quality of the assignments following procedure is adopted
- The assignments are designed to map the COs of the course.
- The assignments are designed to cover both theoretical and numerical portion of the course.
- The questions given are categorized to knowledge, comprehension, application, analysis, evaluation and synthesis levels.
- Faculty can choose the type of assignment to be given (questions/ open book test/ seminars or presentations)
- In the evaluation of assignment, the required feedback corresponding to each answer is given by the faculty, so that the student can understand the mistake.
- The faculty after submission of every assignment explains the solution of the questions in the class which enable the students to perform well in the final examination.
- For any genuine reason, if a student is unable to perform well in the given internal assessment tests or assignment, improvement test is given to him/her.
- If a student remains absent for all the tests conducted, they are marked as “Absent” in the result.
- Assignments are used as a tool for practice and evaluation is based purely on internal assessment.

## **The assessment tools and processes used to gather the data upon which the evaluation of Course Outcome is based.**

### **(A) List of assessment tools & processes**

#### **1. Direct Assessment Methods:**

- i. Continuous internal evaluation consisting of class surprise tests, mid-term

- examination, make-up tests, presentations and semester examination
- ii. Assessment is implemented by conducting a written scheduled midterm examination of 90 minutes duration having a weight age of 30%, class performance through assignments /interaction/tutorials/viva etc. having 10% and an end-semester major examination of 180 minutes with a weight age of 60%.
  - iii. As a result of the administrative lockdown during the abrogation of article 370 in J&K, the implementation of assessment for Autumn 2019 was changed to a written scheduled end-term examination of 180 minutes' duration having a weight age of 90%, and class performance through assignments /interaction/tutorials/viva etc. having 10% weightage.
  - iv. In view of COVID-19 pandemic, the mode of conducting the exam has been shifted from offline mode to online for Spring 2020. A scheduled midterm examination through online mode of 30 minutes' duration mostly MCQ type having a weight age of 30%, class performance through assignments /interaction/tutorials/viva etc. having 10% and an end-semester major examination with a total weightage of 60% was followed across institute. End-term examination constituted of an online test of 30 minutes with a weight age of 30%, comprehensive viva voce examination through online mode with a weightage of 20% and assignments with a weightage of 10%.

## **2. Indirect Assessment Methods:**

- i. Course exit survey
- ii. Feedback from students
- iii. Placement and higher studies

### **(B) The quality/relevance of assessment processes and tools used**

**Theory:** A written examination covering the course contents taught having analytical involvement and other aspects as per the domain of the course with standard questions as per given time. The examinations are conducted as per a centrally notified schedule as the academic calendar.

**Class Assessment:** A continuous class assessment is done in the form of quiz, presentation and/or assignments.

**Practical Exam:** The lab exam is conducted by a committee formed by the Institute Examination cell along with the course coordinator.

**Project:** It gives students the opportunity to synthesize and apply the knowledge and analytical skills learned in the different disciplines. The project work is started in the seventh semester and continues on to eighth semester. Students are divided into groups of 3 or 4 and programme coordinator allots a project guide for each group. The final evaluation is done by the project evaluation committee which also consists of an external from sister departments.

**Seminar:** The students present a seminar presentation on a topic of their choice and approved the assigned seminar guide. Seminar is evaluated based on the presentation by the students before an evaluation committee consisting of four faculty members.

**Attainment of Course Outcomes of all courses with respect to set attainment levels**

**(a) Course outcome attainment levels:**

**The attainment levels are fixed as under:**

Assessment Method	Level	Attainment levels
<b>Minor</b>	1	50% of the students scoring more than 40% marks
	2	60% of the students scoring more than 40% marks
	3	75% of the students scoring more than 40% marks
<b>Major</b>	1	50% of the students scoring more than 40% marks
	2	60% of the students scoring more than 40% marks
	3	75% of the students scoring more than 40% marks
<b>Continuous Assessment</b>	1	50% of the students scoring more than 40% marks
	2	60% of the students scoring more than 40% marks
	3	75% of the students scoring more than 40% marks

**Table B.2.2.2a**

The benchmark of attainment levels for the Academic year 2019 -2020 and onwards is fixed at 50%.

**(b) Course outcome Attainment calculation of a course**

**Hydropower Engg (CIV-801)**

Assessment Tool	CO1	CO2	CO3	CO4
<b>Minor (Average)</b>	3	3	3	3
<b>Major</b>	3	3	3	3
<b>Continuous Assessment (Assignment)</b>	3	3	3	3
<b>Overall average</b>	3	3	3	3
<b>Overall CO</b>	3(level 3)			

**Table B.2.2.2b**

$$Direct\ CO = \frac{3\ (MidTerm)}{10} + \frac{6(EndTerm)}{10} + \frac{1\ (Class\ Assessment)}{10}$$

Substituting in the above formula

$$Overall\ CO = \frac{3\ (3)}{10} + \frac{6\ (3)}{10} + \frac{1\ (3)}{10} = 3$$

Criterion 2

For Autumn 2019 academic semester only, the following assessment formula was used (due to change in pattern of examination as result of lockdown due to abrogation of article 370 in erstwhile state of Jammu and Kashmir):

$$\text{Direct CO} = \frac{9 (\text{Mid - Term})}{10} + \frac{1 (\text{Class Assessment})}{10}$$

(c) CO Attainment of all courses (Autumn 2017-Spring 2019)

Course Code	Overall CO Attainment
PHY-101	2.65
PHY-102	2.75
HSS-101	3.0
CHM-101	2.75
CHM-101 L	2.75
MTH-101	2.25
CIV-102	2.4
PHY -201	3.0
PHY-202	3.0
HU-201	2.3
CHM-201	2.8
CHM-201L	2.3
MTH-201	4.5
CIV-201	2.25
CIV-301	1.15
CIV-302	2.8
CIV-303	2.83
CIV-304	2.2
CIV-401	2.52
CIV-403	2.05
CIV-404	2.91
CIV-405	2.6
CIV-501	1.88
CIV-502	1.92
CIV-503	2.05
CIV-504	1.32
CIV-505	1.82
CIV-511(E1)	2.125
CIV-511(E1)	3
CIV-601	1.84
CIV-602	2.58
CIV-603	2.27
CIV-604	1.9
CIV-611(E1)	2.52
CIV-612-E1	2.575
CIV-612-E2	1.2
CIV-703	3
CIV-704	2.43
CIV-711(E2)	
CIV-801	2.4

CIV-802	1.57
CIV-811(E1)	3
CIV-811(E1)	2.12
CIV-812(E2)	2.32
CIV-812(E2)	2.575
CIV-812(E2)	1.67
CIVIL-402	2.845

**Table B.2.2.2c**

**(d) CO Attainment of all courses (Autumn 2019-Spring 2020)**

<b>Course Code</b>	<b>Overall CO Attainment</b>
CIP100/ CIP-100 (CIV)	2.207
CIL100/ CIT-100 (CIV)	1.624
MEL100	2.82
PHY-101/PHL100	2.70
HUL-100	2.670
CHM-101/CYL-100	2.78
MTH-101/MAL100	1.56
HUP-100	2.30
PHY-102/PHP100	2.78
WSP100	2.9
HUL-101	2.600
EEL-100	2.38
ITL100	2.9
CYL-101	2.75
MTH-201/MAL-101	3
ELP-100	2.8
CYP100/CHM-101 L	2.80
ITP100	2.7
MAT-202/MTH-303	1.96
HSS 301	2.91
CIV-301	2.95
CIV-301 (P)	2.8
CIV-302	2.75
CIV-302(P)/CVL 202	2.9
CIV-303	1.61
CIV-303(P)	2
CIV-304	2.28
CVT-301/CIV-501	2.06
CVT-350	2.90
CIV-401	2.808
CIV-401 (ELECTIVE)	3
CIV-402	3
CIV-402(P)	3
CIV-403	2.375
CIV-403(P)	1.925
CIV-403(SC)	2
CIV-404	2.935

CIV-404 (P)	2.5
CIV-405	2.750
MTH-403	3.000
CIV-501(P)	3.000
CIV-502	2.280
CIV-502(P)	2.680
CIV-503	2.096
CIV-503(P)	3
CIV-504	1.1
CIV-505	2.690
CIV-506(E1)(CT)	2.250
CIV-506(E1)(ES)	2.46
CIV-601	2.800
CIV-601(P)	3.000
CIV-602	2.620
CIV-602(P)	3.000
CIV-603	2.900
CIV-603(P)	3
CIV-604	2.888
CIV-611(E1) (AGE)	2.440
CIV-611(E1) (WSM)	2.324
CIV-612-E2 (AH)	3
CIV-701	2.58
CIV-701 (P)	2.8
CIV-702	2.77
CIV-703	3.000
CIV-704	3
CIV-705	2.232
CIV-711(E1) (ASA)	2.16
CIV-711(E2) (R&AE)	2.960
CIV-801	3.0
CIV-802	2.800
CIV-811(E1) (RM&TE)	2.232
CIV-811(E1) (TP&E)	2.94
CIV-812(E2) (GIT)	2.633
<b>Average</b>	<b>2.60</b>

*Table B.2.2.2d*

**The expected level of attainment for each outcome:**

The expected level of each Program Outcome (POs) and Program Specific Outcome (PSOs) is given in Table 2.2.2e.

Expected level of attainment for each outcome

<b>Description of Programme outcome (PO) / Programme specific outcome (PSO)</b>	<b>Expected level of attainment</b>
<b>PO1:</b> Basic knowledge of contemporary Science and Technology along with Civil Engineering fundamentals and essential computational techniques/procedures that aid in solving real life engineering problems.	2 – 2.5

<b>PO2:</b> Formulate and analyze a complex civil engineering problem supported by literature survey leading to substantial conclusions.	2 – 2.5
<b>PO3:</b> Solutions for complex civil engineering problems and design system components/processes keeping in view the appropriate considerations for the public health and safety, society, culture and environment.	2 – 2.5
<b>PO4:</b> Systematic approach includes design of experiments, analysis and interpretation of data, and synthesis of the information to investigate a complex civil engineering problem using research-based knowledge to obtain reasonable conclusions.	2 – 2.5
<b>PO5:</b> Develop and use appropriate state-of-the-art software's and modern IT-based engineering tools/resources for modeling of complex civil engineering problems, dully identifying the limitations.	1.5 - 2
<b>PO6:</b> Utilize the contextual information in order to examine societal, health, safety, legal and cultural issues and identify the consequent responsibilities relevant to the professional engineering practice based on reasoning.	1.5 - 2
<b>PO7:</b> Ensure sustainable development by means of professional engineering solutions in context of the impact on the environment and the society.	1.5 - 2
<b>PO8:</b> Adhere to professional ethics and norms, and respect human values while practicing the engineering profession.	1.5 - 2
<b>O9:</b> Perform efficiently as a member or leader of a team or as an individual in diverse work environments	1 – 1.5
<b>PO10:</b> Deliberate effectively and clearly on activities related to engineering profession and to comprehend and communicate ideas, interpretations and outcomes of an engineering analysis efficiently in both verbal and printed form.	1 – 1.5
<b>PO11:</b> Implement knowledge and understanding of the engineering principles together with efficient management of time and financial resources as a leader or a team member in executing engineering projects.	2 – 2.5
<b>PO12:</b> Inclination to life-long learning through self-education, interaction with stalwarts in the field of civil engineering, participation in professional societies and constantly updating the knowledge regarding recent developments.	2 – 2.5
<b>PSO1:</b> Ability to demonstrate professional engineering approach, including application of principles and utilization of technical resources such as software's towards solving technical problems requiring civil engineering interventions.	2 – 2.5
<b>PSO2:</b> Ability to furnish and/or analyze designs and construct structural systems, produce related documents, drawings and reports, and present objective estimates of the related quantities.	1.5 - 2
<b>PSO3:</b> Ability to conduct field and laboratory investigations pertaining to civil engineering domain, and utilize modern tools and techniques of surveying.	2 – 2.5

**Table B.2.2.2e**

**Example Evaluation:**

**Course taken: Hydro power Engg. & DOS II CO-PO Mapping Matrix**

COURSE		PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Hydro Power Engg. Civ-801	CO1	3	3	3	3	-	2	2	1	-	2	-	2
	CO2	3	3	3	3	-	2	2	1	-	2	-	2
	CO3	3	3	3	3	-	2	3	1	-	2	-	2
	CO4	3	3	3	3	-	3	3	1	-	1	-	3
DOS-II CIV-601	CO1	3	3	3	3	2	1	2	2	-	-	3	2
	CO2	3	3	3	3	2	1	2	2	-	-	3	2
	CO3	3	3	3	3	2	1	2	2	-	-	3	2
	CO4	3	3	3	3	-	3	1	2	-	-	3	2
	CO5	3	3	3	3	-	1	-	-	-	-	3	-
	CO6	3	3	3	3	-	3	-	-	-	-	3	-

*Table B.2.2.2f*

**CO-PSO Mapping Matrix**

COURSE		PSO 1	PSO 2	PSO 3
Hydro Power Eng Civ-801	CO1	2	3	3
	CO2	2	2	2
	CO3	3	3	3
	CO4	3	3	2
DOS-II CIV-601	CO1	3	2	2
	CO2	3	2	2
	CO3	3	2	2
	CO4	3	2	2
	CO5	3	2	2
	CO6	3	2	2

*Table B.2.2.2g*

**CO-Attainment Matrix**

Assessment Tool	CO 1	CO 2	CO 3	CO 4
Minor (Average)	3	3	3	3
Major	3	3	3	3
Continuous Assessment (Assignment)	3	3	3	3
Overall average	3	3	3	3
Overall CO	3(level 3)			

*Table B.2.2.2h*

**COURSE-PO Mapping Matrix**

COURSE		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Hydro- Power Engineering	Actual	3	3	3	3		2.25	2.5	1		1.75		2.25
	Attained	2.1	2.1	2.1	2.1		1.4	1.8	0.7		1.8		1.6

**Table B.2.2.2i**

Actual PO level is calculated by taking the average of POs from table 3.14.

Attained PO level is calculated by considering the COs to which the POs are related from table 3.14 and corresponding Co attainment from table 3.16

$$Attained\ PO1 = \frac{3 \times 3 + 3 \times 3 + 3 \times 3 + 3 \times 3}{4 \times 3} = 3$$

Similarly, actual PSO level and attained PSO level are calculated.

**COURSE-PSO Mapping Matrix**

COURSE		PSO1	PSO2	PSO3
Hydro-Power Engineering	Actual	2.5	2.75	2.5
	Attained	2.7	3.0	2.7

**Table B.2.2.2j**

Direct attainment is calculated by taking the averages of POs of all courses.

**How results are documented and maintained**

The documents related to direct and indirect assessment tools to calculate the attainment of program outcomes are maintained by the department and are listed as follows:

**Document Maintenances**

Sr. No	Assessment Tool	File Name	Faculty Responsible
1	Theory Examinations	Final Award Roll File	Head of the Department
	Midterm Examination	Course file	Course coordinator
	End Semester Examination	Semester result file	Course coordinator/ Head of Department
2	Laboratory exams	Laboratory Evaluation file	Course coordinator/ Head of Department
3	Comprehensive viva voce	Comprehensive viva voce examination file	Project coordinator/Head
4	Major project	Project Evaluation File	Project coordinator/Head
5	Seminar	Seminar Evaluation File	Project coordinator/Head
6	Placement	Placement record file	Placement coordinator
7	Publication work	Student publication work file	Program coordinator
8	Graduate exit and other survey	Stakeholder Feedback file	Program coordinator

**Table B.2.2.2n**

### **2.2.3 Quality of the student projects (18)**

#### **Process for identification of students projects**

The projects are divided into different major groups depending availability of the specialization of the faculty and more or less allotted to faculty on a uniform basis.

#### **A. Identification of project and allocation methodology to faculty members (2)**

- The student's project activity starts at the commencement of the 7th semester.
- Students are divided into groups of 3-4 students.
- The students submit their area of interest for the project work so that the students explore and utilize their talent fully in order of preferences.
- Using principle of uniform distribution of students among the faculty available in different areas, students are assigned the faculty supervisor.
- The project proposals are framed by the students in consultation with the supervisor and discussion in the faculty group of the particular area of work and the finalized topics are submitted to the co-coordinator and HOD.

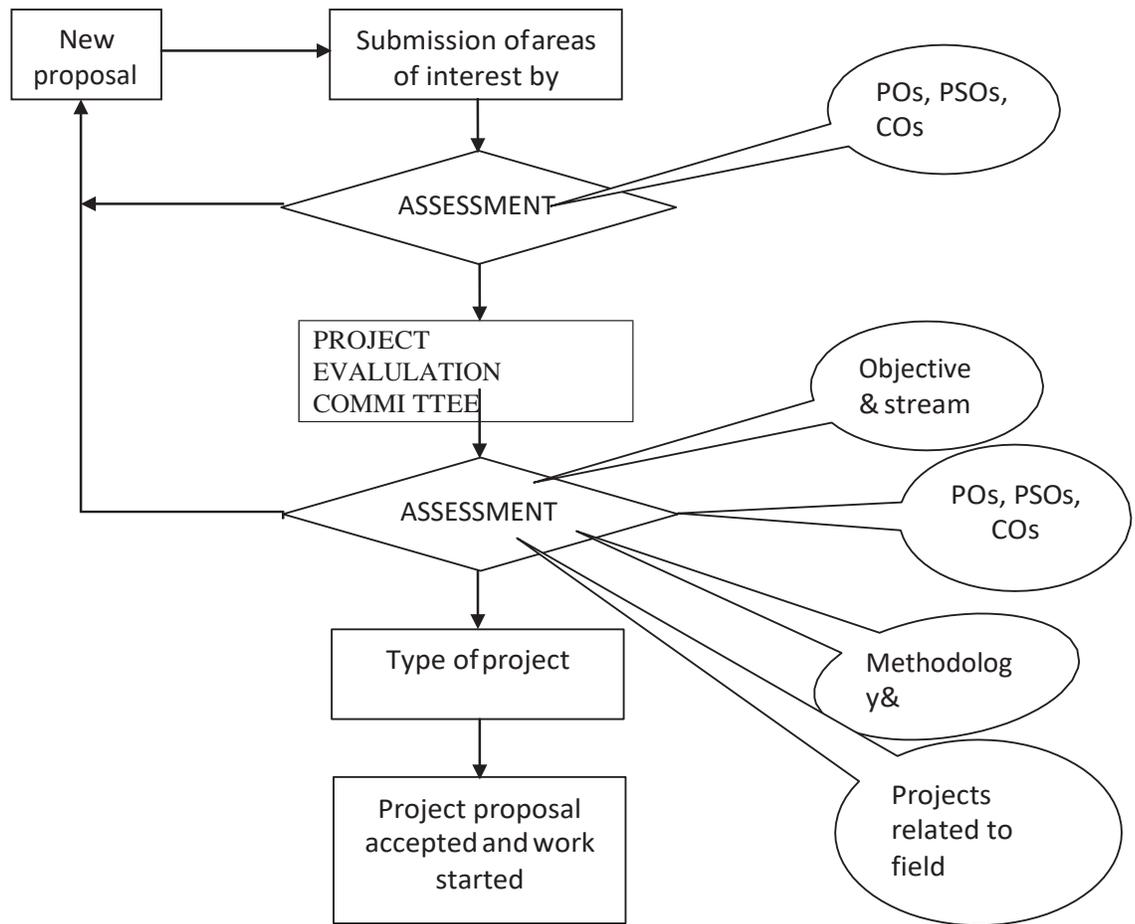
#### **Process for continuous monitoring of student projects**

- Students are directed to maintain a project diary to record the activities on day to day basis regarding the project work. The recorded included the details of their interactions with the project supervisor.

#### **Process to ensure the quality of student projects**

- The Project evaluation committee and the project guide together will analyse the nature of the project during the different stages of evaluation and make sure that the work is environment friendly, ensures safety, ethics and is cost effective.
- The projects are classified into different areas and their relevance to PO's and PSO's are identified to ensure its quality.

**Flow diagram for allotment of project work:**



**Figure B.2.2.3**

**A. Type and relevance of the projects and their contribution towards of POs and PSOs (01)**

Project areas	Mapping with POs	Mapping with PSOs
Structural Engg	PO1 to PO12	PSO1 –PSO3
Geotechnical Engg	PO1 to PO12	PSO1 –PSO3
Transportation Planning & Engg	PO1 to PO12	PSO1 –PSO3
Water Resources & Env. Engg	PO1 to PO12	PSO1 –PSO3
Geology & Allied	PO1 to PO12	PSO1 –PSO3
Relevance to the POs and PSOs:	High	

**Table B.2.2.3a**

**Department of Civil Engineering**  
**National Institute of Technology Hazratbal Srinagar**

*Allotment of project/seminar supervisors for 7<sup>th</sup> semester civil engineering students*

**Batch: 2013-2017**

S.No.	Name of Faculty member	Enr. No./13	Name
1	<b>Dr. A. R. Dar</b>	36	SANA FAYAZ
		80	MOHAMMAD SHOAB MIR
		4	FAIZAN SIDIQI
2	<b>Dr. J. A Naqash</b>	12	ISHFAQ AHMAD TELI
		14	AADIL NABI NATH
		15	ASIM MUSTAQ
		11	ISHFAQ MOHI UD DIN
		21	NAYEEM GULZAR NAJAR
		82	SHASHWAT SIKAWAR
		97	SHASHANK KATIYAR
		94	DEEPSHIKHA SANI
3	<b>Dr. J.M. Bandy</b>	109	KASURJULLA MAHENDRA
		18	AAMIR MUBARAK
		19	MUDASIR AHMAD HAJAM
		33	BANWARI LAL
		81	SHRI BHAGWANI SAINI
4	<b>Dr. J. A. Bhat</b>	61	YASIR FAROOQ BEIG
		5	MOHD ASLAM KUMAR
		46	ASSIF KHALIQ
		60	VINITA MEHAR
		79	ANKIT GUPTA
		48	MOHAMMAD AMIN KUMAR
5	<b>Dr. M.A.Tantary</b>	68	AIJAZ AHMAD
		34	NIKET GUPTA
		40	SANJEEV RAUSHAN
		28	GHULAM HAIDER
		49	AMRENDRA PRATAP RAI
		107	VIVEK UPADHYAY
6	<b>Er. A. A. Masoodi</b>	114	HJIMANSHU CHOUDHRY
		115	SANJEEV KUMAR
		93	VISHAL PRAKASH
		65	ARVIND SINGADIA
		71	PRINCA KUMAR
7	<b>Er. F. A Mir</b>	8	MUMTAZ AHMAD
		9	AADIL NISAR WANI
		26	SHEIKH AZEEM HAFIZ
		03	RAIMA TARIQ
		30	MUJEEB UL HAQ
		44	MUJTAHID MAMOON ALI

Criterion 2

		45	MALIK KAMILA MUSTAQ
8	<b>Dr. M.Y.Shah</b>	7	NADIA MUBARAK
		13	HAFSAH AHMAD
		59	AFEER JALAL KHAN
		76	GIRIJA SHANKAR SHARMA
		91	AKASH VERMA
		95	AKSHAY JANWAY
9	<b>Dr. B.A.Mir</b>	16	VARUN KUMAR
		22	IMTISAL HUSSAIN SOFI
		23	VIJAY KUMAR
		108	RAMEHANDRA POTALLIA
10	<b>Dr.M.S.Mir</b>	20	RAHUL KUMAR
		88	NIHAL PANDEY
		90	AVICHAL CHANDRA
		86	ANURAG SHARMA
		39	M. AMINE KUMAR
		85	RAJESH KUMAR
		25	THUPSTAN TSENG
		101	MANISH KUMAR
		105	ANURAG PRATAP SINGH CHOUHAN
		64	RAMPAL
		24	SANTOSH KUMAR
11	<b>Dr. M. A. Lone</b>	1	ANJALI DUA
		2	SHIVRAM VERMA
		29	UMESH MAHOR
		39	RAHUL VERMA
		70	ABHINAV KUMAR
		75	ROBBY LAL
12	<b>Dr. M. A. Ahangar</b>	54	MANAN SHABIR SHERWANI
		52	SHAEQ SHOWKAT
		56	ARSLAN AMIN
		51	MIR DAWAR HABIB
		98	MANOJ KARELA
		100	DEVESH KUMAR
13	<b>Dr. A.Q.Dar</b>	106	SHIVAM TIWARI
		27	MOHD ANJUM
		31	HEEMANT MEENA
		63	PRADEEP KUMAR
		72	ABHISHEK KUMAR GAAUTAM
		78	DILIP KANADA
14	<b>Er.R.R.Mir</b>	87	AMIT RANJAN
		92	SANJAY KUMAR
		96	RAHUL CHUREY
		99	HEENA RAWAT
		103	ASHISH KUMAR
		110	AMRESH KUMAR

15	<b>Er.Danish Ahmad</b>	104	ASHWANI KUMAR
		89	ABDULLAH ANSARI
		116	MOHD ALTAF SHAH
		57	HAKHEEM NADEEM SARWAI
		111	ROHIT KUMAR
		112	JITENDRA SINGH
16	<b>Dr. S.K.Bukhari</b>	10	MOIN UL ISLAM
		43	MOONIS UL ISLAM MATOO
		66	SHUBHAM JADIJA
		74	VINOD KUMAR SHARMA
		84	SHUBAM BADGAL
		102	DEVKARAN

Table B.2.2.3b

**Department Of Civil Engineering**  
**National Institute of Technology Hazratbal Srinagar**  
*Allotment of project/seminar supervisors for 7<sup>th</sup> semester civil engineering students:*  
**Batch: 2014-2018**

S.No.	Name of Faculty member	Enr.No.	Name
1	<b>Dr. A. R. Dar</b>	24/14	MUHEEB MAJID NAJAR
		25/14	MUGEES TAHOOR
		26/14	MOHD HASEEB SHORA
		30/14	OWAIS SALEEM
		33/14	VIMAL JEET KHAJURA
		38/14	SUDHANSHU MAHAJAN
2	<b>Dr. J. A Naqash</b>	20/14	IMTIYAZ AHMAD AHANGER
		28/14	MEHBOOB ALI KHAN
		47/14	ZAKIR HUSSAIN
		101/14	DEEPAK
		104/14	GAURAV KUMAR
		105/14	SUNEEL KUMAR
3	<b>Dr. J.M. Bandy</b>	51/14	ABDUL BASIT KHAN
		53/14	MOHAMMAD SHAMSUL HAQ
		57/14	AMIR AZIZ SHEIKH
		86/14	PREM SINGH MEENA
		106/14	NEERAJ AGRAHARI
		643/14	RAVINDRA SINGH
4	<b>Dr. J. A. Bhat</b>	11/14	DACHEN DAWA
		642/14	PUSHKAR PRETAP SINGH
		70/14	BHANU PRATAP SINGH
		78/14	HIMANSHU GUJAR
		80/14	AVINASH KAJLA
		92/14	SUNIL KUMAR CHAHAR
		83/14	AZAD AHMED
		644/14	MOHD ASIF KHAN
		97/14	GULSHAN GARED
		98/14	SUNIL

Criterion 2

		100/14	NARENDRA KUMAR
		118/14	JAGDISH PALIWAL
6	Er. A. A. Masoodi	119/10	SHIVDAR
		121/14	VAIBHAV GUPTA
		635/14	DEVESH SONI
		645/14	AMIT KUMAR
		650/14	LOVEKUSH KUMAR
		112/14	DINESH
7	Er. F. A Mir	120/14	MOHD ILYAS BHAT
		637/14	MD. SARFARAZ REYAZ
		641/14	MOHD RIZWAN
		638/14	KATI KI REDDY PRAVALLIKA
		639/14	AMIT SHUKLA
		646/14	ASHOK SHAIMA
8	Dr. M.Y.Shah	04/14	MS.SEERAT MALIK
		13/14	MS.SUZEENA IFTIKHAR
		16/14	MS. INSHA MUZAFFAR MALIK
		45/14	GURTEJ SINGH
		63/14	BAL GOPAL NAGAR
		87/14	MESHRAJ SINGH
9	Dr. B.A.Mir	654/14	BASIQ NASEER KHAN
		653/14	LALA MUSEDIQ ABBES SHABIR
		647/14	MOIN KHAN
		122/14	PARAS RATHORE
		636/14	ANIL KUMAR
		110/14	DEEPAK KR JHA
10	Er. Falaq Zahoor	03/14	MS.SUHAILA ANJUM
		05/14	WASEEL AHMAD DAR
		07/14	MS.FAAKIRAH RASHID MIR
		29/10	ANIES UL AMIN
		35/14	AAQIB RASHID BAHT
		54/14	NAVEED UL HASSAN
		55/14	MUIZ AHMED BHAT
		69/14	NAVEED MURTAZA GULZAR
		115/14	MIR FAZIAN FAROOQ
		21/14	ZUBAIR ZAHOOR BANDEY
		651/14	ASIF JEELANI BHAT
11	Dr. M.S.Mir	652/14	ANAYAT BAHSIR
		108/14	PRAKESH KUMAR
		111/14	SHUBHAM JAIN
		113/14	DAKSH JAIN
		114/14	VIPIN VIJAY
		116/14	SANJIV KUMAR BHARGEVA
		117/14	SONU KUMAR
12	Dr. M. A. Lone	01/14	HARIS WAJEEH MIR
		09/14	MAJID MOHI-UL-DIN
		12/14	SHAHIQ AHMAD WANI

		52/14	VISHAL TIKU
		60/14	PIYUSH KUMAR VAIBSHY
		61/14	CHANDRA KANT BHASKAR
13	Dr. M. A. Ahangar	08/14	UBAID HYDER MIR
		14/14	SYED ABDUL MATEEN
		15/14	SALMAN SADAT DAR
		64/14	VIKRAM JEET SINGH
		65/14	PANKAJ KUMAR
		66/14	RAJ KUMAR CHOTLA
		14	Dr. A.Q.Dar
31/14	AMARJEET SINGH		
41/14	RANJEET KUMAR THAPA		
43/14	SHUBAM MAHAJAN		
36/14	ANUP KUMAR		
46/14	HIMANSHU ROY		
15	Er. R.R.Mir	39/14	DHRUV TADWAL
		17/14	ATTI-UR-RAHMAN
		22/14	HOUSHER AHMAD MALIK
		27/14	MOHD IQBAL
		68/14	ANOOP YADAR
		77/14	PRASHANT MISHRA
16	Er. Danish Ahmad	79/14	PRAKHAR KANAUIRA
		40/14	AAQIF YOUSF BHAT
		32/14	SUHAIL YAQOUB
		37/14	ADIL RASOOL KUMAR
		50/14	PURUSHESH NAAD
		62/14	DEVENDRA MEENA
		72/14	SUNIDHI SUPRIYA
17	Dr.S.R.Shah	19/14	DHEERAJ KUMAR
		89/14	JAGDISH KUMAR KASAUSHAN
		91/14	BHARAT JAYSEWAL
		93/14	ADARSH SEHU
		95/14	AMIT KUMAR
		96/14	AVADHESH KUMAR
18	Dr.S.K. Bukhari	49/14	PUSHEP KUMAR
		59/14	SHEIKH AQUIB
		90/14	SHANKAR KUMAR
		123/14	ANUPEM KUMAR
		640/14	ADITYA PRAKASH
		44/14	VINOD KUMAR
		41/13-14	SHAISTA JAN

Table B.2.2.3b

**Department of Civil Engineering**  
**National Institute of Technology Hazratbal Srinagar**

*Allotment of project/seminar supervisors for 7<sup>th</sup> semester civil engineering students*

**Batch: 2015-2019**

S.No.	Name of Supervisor	Name	Enr.No.
1	<b>Dr. A. R. Dar</b>	Adfar Aaghaz Mir	Civ/53/15
		Zahid Parvaiz	Civ/03/15
		Amir Farooq Shah	Civ/31/15
		Akshay Saxena	Civ/139/15
		Rishabha Tiwar	Civ/140/15
		Anshu Agarwal	Civ/141/15
2	<b>Dr. J. A Naqash</b>	Ritik Sharma	Civ/117/15
		Rahul	Civ/120/15
		Abhishek Gourav	Civ/122/15
		Raghuvendra Pratap Singh	Civ/129/15
		Abhishek Panday	Civ/84/15
3	<b>Dr. J.M. Bandy</b>	Sunil Kumar Patel	Civ/121/15
		Yashawant Dhayal	Civ/130/15
		Pranjil Chaluhan	Civ/131/15
		Damini Pandit	Civ/132/15
4	<b>Er. F. A Mir</b>	Faisal Firdous	Civ/14/15
		Muzamil Shafi Wani	Civ/15/15
		Khalid ur Rehman	Civ/19/15
		Anand Kumar	Civ/109/15
		Devendra Kumar Tiwari	Civ/112/15
5	<b>Dr. M.Y.Shah</b>	Shailendra Singh	Civ/113/15
		Samma Malik	Civ/08/15
		Bazela Manzoor	Civ/11/15
		Asmat Nabi	Civ/24/15
		Haroon Rashid	Civ/18/15
		Mudasir Ahmad Zaki	Civ/43/15
6	<b>Dr. B.A.Mir</b>	Rafiq Ahmad	Civ/46/15
		Hanan Shawal	Civ/10/15
		Muzamil Hassan	Civ/52/15
		Nasir Ahmad Ahanger	Civ/57/15
		Shakir Ahmad Tarray	Civ/27/15
		Aqib Assad	Civ/28/15
7	<b>Dr. M. A. Lone</b>	Imtiyaz Gul	Civ/49/15
		Khushnuma Mushtaq	Civ/17/15
		Nasier Hussain	Civ/29/15
		Ishan Gautam	Civ/61/15
		Sunil Kumar	Civ/33/15
8	<b>D. M. A. Ahangar</b>	Tsering Youtan	Civ/42/15
		Kunal Dogra	Civ/44/15
		Bharat Gupta	Civ/59/15

Criterion 2

		Ashish Meena	Civ/67/15
		Paul FGaisal	Civ/68/15
		Sahil Sharma	Civ/74/15
		Sunil Dhaker	Civ/133/15
		Jatin Siddhartha	Civ/35/15
9	<b>Dr. A.Q.Dar</b>	Pardeep Kumar	Civ/36/15
		Mahesh Kumar	Civ/37/15
		Akhil Kumar Bhagat	Civ/40/15
		Liyaaat Ali	Civ/38/15
		Junaid Ahmad Najar	Civ/41/15
		MD Firoz Alam	Civ/93/15
10	<b>Dr. J. A. Bhat</b>	Akash Yadav	Civ/134/15
		Anuraag Kumar	Civ/135/15
		Kuldeep Chauhan	Civ/137/15
		Shivendra Sahai	Civ/62/15
		Iftikhar Gojri	Civ/75/15
11	<b>Dr.M.S.Mir</b>	Afaan Bilal	Civ/04/15
		Faheem Farooq Reshi	Civ/09/15
		Haidayat ullah	Civ/32/15
		Joseph Nicholas Jaideep	Civ/58/15
		Rohtan Singh	Civ/63/15
		Jogeshvar Bhindrar	Civ/65/15
12	<b>Dr.M.A.Tantary</b>	Aamir Suhail Hajam	Civ/16/15
		MD Fasihur Rahman	Civ/128/15
		Adfar Aaghaz Mir	Civ/53/15
		Yogesh Kumar	Civ/142/15
		Anil Kumar Yadavq	Civ/143/15
		Vinod Chaudhary	Civ/128/15
13	<b>Er. A. A. Masoodi</b>	Markandey Rai	Civ/118/15
		Ravi Kumar Verma	Civ/119/15
		Vikas Chandra	Civ/129/15
		Manishg Kumar	Civ/138/15
		Shnu Kumar	Civ/130/15
		Rishabh Sahu	Civ/131/15
14	<b>Er.Danish Ahmad</b>	Kriti Dhiman	Civ/05/15
		Zarnain Fayaz	Civ/06/15
		Aman Srivastava	Civ/136/15
		Vishav Jeet	Civ/12/15
		Sarthak Navesh	Civ/20/15
		Rohit Kumar Bhagat	Civ/25/15
15	<b>Er.R.R.Mir</b>	Sahil	Civ/108/15
		Money bGupta	Civ/110/15
		Vivek Kumar Yada	Civ/111/15
		Vinit Jangir	Civ/114/15
		Shubham Kumar Jangir	Civ/115/15
		Diryanshu Nath Tripathi	Civ/116/15
16	<b>Dr.S.R.Shah</b>	Abhi Atri	Civ/54/15
		Nitesh Kumar Meena	Civ/98/15

		Sharda Khande	Civ/104/15
		Alahari Jayanth	Civ/105/15
		Aman Kumar	Civ/106/15
		Ankit Kumar	Civ/107/15
17	<b>Dr.S.K. Bukhari</b>	Aayat Abid Kamli	Civ/02/15
		Irum Qadir	Civ/22/15
		Shahrukh Saleem	Civ/26/15
		Veenu Thappa	Civ/55/15
		Rohini Angral	Civ/66/15
		Updesh Kumar	Civ/80/15
18	<b>Er. Falaq Zahoor</b>	Fuzail Showkat Wani	Civ/60/15
		Sajad Ahmad Malla	Civ/73/15
		Ritika Mongra	Civ/86/15
		S. Mehran Rasool Andrabi	Civ/94/15
		Waseem Ahmad B hat	Civ/77/15
		Mohd Younis Hajam	Civ/07/15
		Wasim Ahmad Katariya	Civ/21/15
		Basit Tariq Guhnow	Civ/23/15
		Pirzada Uzair	Civ/39/15
		Irfan Ahmad Kumar	Civ/45/15
		Hilal Ahmad Najjar	Civ/51/15
		Tawseef Iqbal	Civ/30/15

*Table B.2.2.3c*

**Department Of Civil Engineering  
National Institute Of Technology Hazratbal Srinagar**

*Allotment of project/seminar supervisors for 7<sup>th</sup> semester civil engineering students.*

***Batch: 2016-2020***

<b>Structural Engineering</b>			
<b>S.No.</b>	<b>Name of Faculty member</b>	<b>Name</b>	<b>Enr.No.</b>
1	<b>Dr. A. R. Dar</b>	Sheikh Junaid Fayaz	2017BCIV003
		Masroor Shafi	2017BCIV076
		Shakir Rather	2017BCIV044
2	<b>Dr. J. A. Bhat</b>	FAIZAN YOUSUF	2017BCIV014
		AAQIB AHMAD HAJAM	2017BCIV042
		Asif Nawaz Ahmad Bhat	2017BCIV040
		JYOTI PRAKASH	2017BCIV101
		Abhay mishra	2017BCIV085
		NITISH KUMAR	2017BCIV084
3	<b>Dr.M.A.Tantary</b>	Umer farooq	2017BCIV039
		MIR MUNEEB	2017BCIV007
		M vinay kumar	2017BCIV090
		Venkat Sai boddepalli	2017BCIV100
		Aman Saurav	2017BCIV106
4	<b>Er. A. A. Masoodi</b>	Harveer Singh	2017BCIV077
		MOHD ASHRAF KAMRAN	2017BCIV002

		Shivam satyadarshi	2017BCIV112
		Deepak Kumar	2017BCIV029
		Amresh ranjan	2017BCIV079
		Pradeep Kumar Meena	2017BCIV109
5	<b>Dr. F. A. Sofi</b>	MOIN IBNE ASHRAF	2017BCIV071
		Faizan ul haq	2017BCIV038
		Vineet Kumar	2017BCIV057
		Tajamul Islam	2017BCIV065
		OWASE AHMAD TEELI	2017BCIV001
		AFROZ	2017BCIV107
6	<b>Dr. Shakeel Waseem</b>	Zahoor Ahmad Teli	2017BCIV072
		Syed Faheem	2017BCIV008
		Burhan Ahmad Wani	2017BCIV037
		Azhar ud din Ghakhad	2017BCIV062
		Sanjeev kumar Verma	2017BCIV091
		Rigzen Angmo	2017BCIV075
<b>Geotechnical Engineering</b>			
7	<b>Er. F. A. Mir</b>	Soban Nasir	2017BCIV053
		Abrar Naseer	2017BCIV055
		Waseem Niyaz	2017BCIV006
		Mohsin Aadil	2017BCIV047
		Ankush kumar	2017BCIV059
		Anooj Kumar	2017BCIV041
8	<b>Dr. M.Y.Shah</b>	Mosin Shabir Bhat	2017BCIV011
		Faheem Ahmad Ahangar	2017BCIV017
		Mohammad Shoaib Shaingogrie	2017BCIV021
		Aalima Showkat	2017BCIV023
		Aijaz Ahmad Baig	2017BCIV012
		Aaqib Ayoub Mir	2017BCIV010
9	<b>Dr. B.A.Mir</b>	Taseen Rashid	2017BCIV013
		AAQIB GULL	2017BCIV028
		Nitish kumar	2017BCIV105
		Angad mahawar	2017BCIV093
		MUBASHIR HUSSAIN MALIK	2017BCIV027
		Auqib Rashid Dar	2017BCIV019
<b>Transportation Engineering</b>			
10	<b>Dr. M.S.Mir</b>	ZAHID ZAHOOR BHAT	2017BCIV043
		Aman Kumar	2017BCIV049
		Malik Najeebul Feroz	2017BCIV025
		Hebah Jahan	2017BCIV069
		Danish Shafi	2017BCIV036
		Mohd Hussain Swalehi	2017BCIV022
		Danish Bashir	2017BCIV031
		Amit Damathia	2017BCIV005
11	<b>Dr. Abdullah</b>	Umer Nabi	2017BCIV034
		Sourabh Mishra	2017BCIV087
		Bisma farooq	2017bciv061
		Ankit Kumar Maurya	2017BCIV099

		Asifa Jan	2017BCIV074
		SANDEEP SINGH	2017BCIV073
<b>Water Resources Engineering</b>			
12	<b>Dr. M. A. Lone</b>	Kiran Choudhary	2017BCIV050
		ASLAM KHAN	2017BCIV097
		PRINCE SALMAN NAJAR	2017BCIV051
		Vishal Kumar	2017BCIV096
		Aasif Ali	2017BCIV082
		Amit kumar	2017BCIV086
13	<b>Dr. M. A. Ahangar</b>	NIKHIL ANAND	2017BCIV052
		Shalini priya	2017BCIV060
		JITENDRA KUMAR VERMA	2017BCIV098
		Manikant kumar	2017BCIV088
		RAHUL MEENA	2017BCIV048
		Prakhar Goyal	2017BCIV080
14	<b>Dr. A.Q.Dar</b>	Dinesh Shougaijam	2017BCIV102
		KUNDAN KUMAR	2017BCIV045
		ABHAY KUMAR	2017BCIV108
		Badavath Suresh	2017BCIV046
		JUNAID JAMEEL	2017BCIV111
		DHARMENDRA KUMAR	2017BCIV103
15	<b>Er.R.R.Mir</b>	GAURAV ANAND	2017BCIV113
		GOPAL KUMAR	2017BCIV116
		ASHUTOSH KUMAR	2017BCIV081
		Pallvi Kundal	2017BCIV078
		Manu Saksham Mangotra	2017BCIV114
		NIDHI SINGH	2017BCIV089
16	<b>Er.Danish Ahmad</b>	Mudasir Ahmad Teli	2017BCIV064
		Praveen Meena	2017BCIV104
		Prashant Singh Gautam	2017BCIV110
		Satish Saini	2017BCIV092
		Brahmdutt prajapati	2017bciv115
17	<b>Dr.S.R.Shah</b>	Pavan Kumar	2017BCIV095
		Mohsin Aadil Ramzan	2017BCIV047
		Priya Kumari	2017BCIV004
		Javid Ahmad Dar	2017BCIV018
		Chahat	2017BCIV032
		Manish Sharma	2017BCIV094
<b>Engineering Geology</b>			
18	<b>Dr.S.K. Bukhari</b>	Arif Reyaz	2017BCIV033
		Akash Singh	2017bciv015
		Noamann bin farooq	2017bciv020
		Akash Bharti	2017BCIV030
		RISHABH KATIYAR	2017BCIV056
		Mustafa	2017BCIV009
19	<b>Er. Falaq Zahoor</b>	Owaise Bashir	2017BCIV016
		Sajad Ali	221/08-20

Table B.2.2.3d

**Distribution of students among various Areas Based on Faculty Strength:****Batch: 2013-2017**

Project Areas	Faculty Strength in the Area	No of Students
		2013-2017
Structural Engineering	07	33
Geotechnical Engineering	03	18
Transportation Engineering & Planning	01	10
Water Resources & Env. Engg	05	30
Geology & Related Areas	01	06

*Table B.2.2.3e***Batch: 2013-2017**

Project Areas	Faculty Strength in the Area	No of Students
		2014-2018
Structural Engineering	06	36
Geotechnical Engineering	04	30
Transportation Engineering & Planning	01	06
Water Resources & Env. Engg	06	37
Geology & Related Areas	01	07

*Table B.2.2.3f***Batch: 2015-2019**

Project Areas	Faculty Strength in the Area	No of Students
		2015-2019
Structural Engineering	06	26
Geotechnical Engineering	04	30
Transportation Engineering & Planning	01	06
Water Resources & Env. Engg	06	36
Geology & Related Areas	01	06

*Table B.2.2.3g***Batch: 2016-2020**

Project Areas	Faculty Strength in the Area	No of Students
		2016-2020
Structural Engineering	06	32
Geotechnical Engineering	04	18
Transportation Engineering & Planning	01	14
Water Resources & Env. Engg	06	35
Geology & Related Areas	01	08

**Table B.2.2.3h**

**C. Project related to industry (02)**

- The students are encouraged to take up the industry related projects. This objective is attained by choosing a problem from the industry where the students have undergone the practical training at the lower semester. During the practical training the students encounter different problems which they choose as their final year project.

**D. Process for monitoring and evaluation (02)**

- The supervisor maintains a diary regarding the work carried out by the students working under him. The supervisor interacts periodically usually at-least once a week with the students to determine the progress and to evaluate the contribution of each student. Thus a fool proof monitoring and evaluation is ensured.
- The departmental project evaluation committee meets twice in 7th and 8th semester to assess the progress of the projects.

**E. Process to assess individual and team performance (03)**

- As has been stated above the students remain in constant touch with the supervisor.
- During the interaction the supervisors enquires from the group members about the progress of the work. This process helps the supervisor to determine the performance of the individual and the team. The students are awarded marks during this interaction also by the supervisor so that none of the students lags behind and develop a quality to work individually and with the team.

**F. Quality of completed projects and Evaluation (05)**

- In order ensure the quality work, a departmental committee is constituted comprising of all supervisors as members and HOD as chairman. At the end of 7th semester students are advised to present the work completed so far in front of the committee. The deficiencies are pointed out to the students and they get tuned for the completion of the targeted topic for the project.

The final exam of the project work is held at the end of the 8th semester. The students submit a well-documented Project Report duly certified by the supervisor in a hard bound form. A committee constituted by the HOD and approved by the director, comprising of the departmental members, an external member of the sister department (nominated by the director) and HOD as chairman examines project. The composition of the Departmental Project Review Committee (DPRC) is as under:

1. HOD as Chairman
2. A Professor from a sister department of the Institute
3. An expert preferably from outside the Institute
4. One Senior Faculty member of the Department
5. Concerned supervisor

A PPT presentation is given by the students one by one in the group in front of the committee.

The presentation is followed by the question - answer session and the examination of the

## Criterion 2

prototype developed. The committee members record the marks awarded to each student and final award is arrived at.

- The projects are evaluated by the committee according to the following scheme.

<b>Project Evaluation Committee Criteria for Evaluation</b>	
<b>Criteria</b>	<b>Marks</b>
Fulfilment of POs, PSOs & COs	10
Report/contents etc. Design /Supervisor assessment	40
Presentation /Q&A	30
Knowledge of the work done	20
<b>Total</b>	<b>100</b>

*Table B.2.2.3i*

### **G. Evidences of papers published / Awards received by projects etc. (03)**

- Project reports are available in the department and with the respective supervisor faculty members. Papers published are with the faculty members as evidence

## **2.2.4 Initiatives related to industry interaction (09)**

### **A. Industry Oriented Activities (03)**

The department has a strong relationship and interaction with the construction industry through consultancy and has been contributing in a very strong way for the technology development and addressing of complex problems.

### **B. Industry involvement in the program design and curriculum (02)**

As has been stated in the process for designing the program curriculum (2.1.1) an important feedback is sought from industry where the students get employed so that the performance of the students is enquired. Depending upon the performance as revealed by the feedback of the employer necessary changes are made in the curriculum.

- In view of the COVID-19 Pandemic and other administrative lockdown situation in UT of Jammu and Kashmir, the mode of generating feedback from employers was changed from offline to online for Autumn 2019 onwards. The platform of google forms was utilized by sending the links of each specific form to stakeholders and hence the data was gathered therefrom.

<p align="center"><b>Civil Engineering Department</b>  <b><u>National Institute of Technology, Srinagar</u></b>  <b>INDUSTRY FEEDBACK FOR CURRICULUM DESIGN</b></p>				
<p>The purpose of this survey is to obtain Employer’s input on the quality of education of undergraduate programs in NIT, Srinagar. Your sincere cooperation would enable us to improve the quality of our graduates as per your requirements</p>				
Name of Company/ Organization				
Mailing address				
Sector Private/Public/Academia				
What are the pertinent employability skills to stay updated in current industry trends and thereby improve the quality of the undergraduate program?		Logical Thinking	Good Aptitude	Excellent Communication
<p>Rate the NIT Srinagar Graduates working in your organization using the following criterion.  <b>Put tick mark Knowledge, Skills, Abilities, Attitude and other Attributes expected out of NIT Srinagar graduates.</b></p>				
No.	Overall, are you satisfied with	Excellent (3)	Good (2)	Satisfied (1)
1	Capacity for development and analysis of engineering problems and formulation of appropriate solutions, retaining professional and ethical responsibilities.			
2	Aptitude for self-education, ability to learn new skills and a clear appreciation for the value of life-long learning to update professional knowledge.			
3	Understanding professional engineering solutions for sustainable development and their application in global, national and societal contexts.			
4	Competence for acquiring new skills and applying them in research and development.			
5	Fundamental knowledge in mathematics and science and professional fluency in English both communicative and technical forms.			
6	Development of management and leadership skills that enable successful function of multi-disciplinary teams.			

*Table B.2.2.4a*

**C. Industry involvement in the partial delivery of any regular courses for students (02)**

Industry people who are stalwarts and are predominantly involved in particular areas of works in the field have been invited from time to time to teach some specific parts of syllabi of some courses like 5th Sem HEPMS etc.

**D. Impact analysis of industry institute interaction and actions taken thereof (02)**

The industry institute interaction has been made possible in various ways. The students have been taken for technical visits and shown live projects under execution, the industry people have been invited for lectures on specific projects and works and students have been involved in the various consultancy/ testing works received from industries. Industrial trainings of students are also conducted. The impact of the same has been assessed during the evaluation processes and getting feedback from the students.

### 2.2.5 Initiatives related to industry internship/ summer training (09)

#### A. Industry training /tours for students (02)

Industrial training/tours are organized at 7th and 8th semester levels when the students are fully acquainted with the different streams of mechanical engineering. Following 1 day tours were organized in 2015 to 2017

S.No.	Year-wise Details of Technical Tour with semester/batch and project name/ date		
	2017	2018	2019
1	8 <sup>th</sup> Sem 2013 batch visited Flyover project Srinagar in May 2017	3 <sup>rd</sup> Sem 2014 batch visited Upper Sindh Hydel Project in May 2018	6 <sup>th</sup> Sem 2016 batch visited Kishanganga Power Station, Bandipora
2	7 <sup>th</sup> Sem 2014 batch visited Srinagar Flyover Project in Oct. 2017	-	-

*Table B.2.2.5a*

#### B. Industrial / internship/ summer training of more than two weeks and post training assessment (03)

It constitutes an important component of the curriculum of the department. Students are deputed to projects of their interest and convenience during the winter vacation.

#### Details of the Students who have undergone Industrial Training of more than 2-weeks Batch: 2013-2017

S.No.	Name of the student	En. No.	Particulars of Practical Training
01.	Anjali Dua	01/13	FLYOVER FROM BIKHRAM CHOWK TO GANDHINAGAR ,JKERA
02.	Shivram Verma	02/13	FLYOVER FROM BIKHRAM CHOWK TO GHANDHINAGAR ,JKERA
03.	Raima Tariq	03/13	FLYOVER RAMBHAG JKERA
04.	Faizan Siddiqui	04/13	DMRC PHASE III
05.	Mohd Aslam Kumar	05/13	ECONOMIC RECONSTRUCTION AGENCY RAMBHAG SRINAGAR JKERA
06.	Nadia Mubarak	07/13	JK FLYOVER RAMBAG ERA
07.	Mumtaz Ahmad	08/13	FLYOVER FROM BIKHRAM CHOWK TO GHANDHINAGAR ,JK ERA
08.	Aadil Nisar Wani	09/13	FLYOVER RAMBHAGA JK ER
09.	Moin ul Islam`	10/13	FLYOVER RAMBHAG JK ERA
10.	Ishfaq Mohi ud Din	11/13	FLYOVER RAMBHAGA JK ER
11.	Ishfaq Ahmad Teli	12/13	PROPOSED SIMPLY SUPPORTED

Criterion 2

			PSC GIRDER BRIDGE OVER RIVER R&B VAILOO
12.	Hafsah Ahmad	13/13	FLYOVER RAMBHAG JK ERA
13.	Aadil Nabi Nath	14/13	SPAN GIRDER OVER RIVER JELHUM ANANTHNAG ,R&B ANANTHNAG
14.	Asim Mustaq	15/13	CONSTRUCTION OF NEW BRIDGE GANDERBAL JKPC
15.	Varun Kumar	16/13	FLYOVER FROM BIKHRAM CHOWK TO GHANDHINAGAR ,JK ERA
16.	Aamir Mubarak	18/13	DMRC PHASE III
17.	Mudasir Ahmad Hajam	19/13	FLYOVER RAMBHAGA JK ER
18.	Rahul Kumar	20/13	FLYOVER FROM BIKHRAM CHOWK TO GHANDHINAGAR ,JK ERA
19.	Nayeem Gulzar Najar	21/13	PROPOSED SIMPLY SUPPORTED PSC GIRDER BRIDGE OVER RIVER R&B VAILOO
20.	Imtisal Hussain sofi	22/13	PROPOSED SIMPLY SUPPORTED PSC GIRDER BRIDGE OVER RIVER R&B VAILOO
21.	Vijay Kumar	23/13	RISING AND MAINTENANCE OF ASH DUKE NTPC VIDYANCHAL
22.	Santosh Kumar	24/13	REDEVELOPMENT OF POLICE STATION DELHI RITES LIMITED
23.	Thupstan Tserng	25/13	DELHI METRO RAIL COOPERATION
24.	Sheikh Azeem Hafiz	26/13	FLYOVER RAMBHAGA JK ER
25.	Mohd Anjum	27/13	PROPOSED SIMPLY SUPPORTED PSC GIRDER BRIDGE OVER RIVER R&B VAILOO
26.	Ghulam Haider	28/13	FLYOVER RAMBHAGA JK ER
27.	Umesh Mahor	29/13	REDEVELOPMENT OF POLICE STATION DELHI RITES LIMITED
28.	Mujeeb ul Haq	30/13	FLYOVER RAMBHAGA JK ER
29.	Heemant Meena	31/13	DMRC PHASE III
30.	Banwari Lal	33/13	DELHI METRO RAIL COOPERATION
31.	Niket Gupta	34/13	
32.	Sana Fayaz	36/13	DMRC PHASE III
33.	Rahul Verma	39/13	
34.	Sanjeev Raushan	40/13	
35.	Moonis ul Islam Matoo	43/13	FLYOVER RAMBHAGA JK ER
36.	Mujtahid Mamoon Ali	44/13	FLYOVER RAMBHAG JK ERA
37.	Malik Kamila Mustaq	45/13	DELHI METRO RAIL COOPERATION
38.	Assif Khaliq	46/13	FLYOVER RAMBHAG JK ERA
39.	Mohammad Amin Kumar	48/13	CONSTRUCTION OF ROAD RAMKAY INFRA STRUCTURE

Criterion 2

			AWANTIPORA
40.	Amrendra Pratap Rai	49/13	
41.	Mir Dawar Habib	51/13	FLYOVER RAMBHAGA JK ERA
42.	Shaeq Showkat	52/13	
43..	Manan Shabir Sherwani	54/13	
44.	Arslan Amin	56/13	FLYOVER RAMBHAGA JK ERA
45.	Hakeem Nadeem Sarwai	57/13	
46.	Afeer Jalal Khan	59/13	FLYOVER RAMBHAG JK ERA
47.	Vinita Mehar	60/13	
48.	Yasir Farooq Beig	61/13	DMRC PHASE III
49.	Pradeep Kumar	63/13	FLYOVER FROM BIKHRAM CHOWK TO GHANDHINAGAR ,JK ERA
50.	Rampal	64/13	CONSTRUCTION OF BUILDING RSRDCC RAJASTAN
51.	Arvind Singadia	65/13	CONSTRUCTION OF BUILDING RSRDCC RAJASTAN
52..	Shubham Jadija	66/13	DMRC PHASE III
53.	Aijaz Ahmad	68/13	PROPOSED SIMPLY SUPPORTED PSC GIRDER BRIDGE OVER RIVER R&B VAILOO
54..	Abhinav Kumar	70/13	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT PWD JHUNJHUNU
55.	Princa Kumar	71/13	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT PWD JHUNJHUNU
56.	Abhishek Kumar Gaautam	72/13	CONSTRUCTION OF ROAD SWANKY INFRASTATE ENERGY LIMITED BIHAR
57.	Vinod Kumar Sharma	74/13	CONSTRUCTION OF ROAD SWANKY INFRASTATE ENERGY LIMITED BIHAR
58.	Robby Lal	75/13	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT PWD JHUNJHUNU
59.	Girija Shankar Sharma	76/13	DMRC PHASE III
60.	Dilip Kanada	79/13	ANALYSIS AND DESIGN OF SUPERSTRUCTURE OF MAIN LINE VALUE BUILDING L&T GULF
61.	Ankit Gupta	80/13	DMRC PHASE III
62.	Mohammad Shoaib Mir	78/13	DMRC PHASE III
63	Shri Bhagwani Saini	81/13	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT PWD JHUNJHUNU
64..	Shashwat Sikawar	82/13	METALLURGICAL AND MATERIAL HANDLING NEW DELHI L&T
65.	Shubam Badgal	84/13	OSC UP
66.	Rajesh Kumar	85/13	DELHI METRO RAIL

Criterion 2

			COORPORATION
67.	Anurag Sharma	86/13	
68.	Amit Ranjan	87/13	
69.	Nihal Pandey	88/13	OSC UP
70	Abdullah Ansari	89/13	CONSTRUCTION OF ROAD SWANKY INFRASTATE ENERGY LIMITED BIHAR
71.	Avichal Chandra	90/13	
72..	Akash Verma	91/13	DELHI METRO RAIL COORPORATION
73.	Sanjay Kumar	92/13	RISING AND MAINTENANCE OF ASH DUKE NTPC VIDYANCHAL
74.	Vishal prakash	93/13	
75.	Deepshikha Sani	94/13	CONSTRUCTION AND DESIGN OF STRUCTURE AT ESSAR STEEL INDIA LIMITED GUJRAT
76.	Akshay Janway	95/13	REDEVEPLOMENT OF POLICE STATION DELHI RITES LIMITED
77..	Rahul Churey	96/13	TAWA PROJECT CIRCLE MADYA PRADESH
78.	Shashank Katiyar	97/13	CONSTRUCTION AND DESIGN OF STRUCTURE AT ESSAR STEEL INDIA LIMITED GUJRAT
79.	Manoj IKarela	98/13	CONSTRUCTION OF BUILDING RSRDCC RAJASTAN
80	Heena Rawat	99/13	DMRC PHASE III
81.	Devesh Kumar	100/13	DMRC LIMITED
82.	Manish Kumar	101/13	CONSTRUCTION OF FLYOVER PATNA,BRPNN
83.	Devkaran	102/13	DMRC LIMITED
84.	Ashish Kumar	103/13	CONSTRUCTION OF FLYOVER PATNA,BRPNN
85.	Ashwani Kumar	104/13	CONSTRUCTION OF FLYOVER PATNA,BRPNN
86.	Anurag Pratap Singh Chouhan	105/13	OSC UP
87.	Shivam Tiwari	106/13	CONSTRUCTION OF FLYOVER PATNA,BRPNN
88.	Vivek Upadhyay	107/13	RISING AND MAINTENANCE OF ASH DUKE NTPC VIDYANCHAL
89.	Ramehndra Potalia	108/13	CONSTRUCTION OF UNDERGROUND STATION AND TUNNEL ,J KUMAN DELHI
90.	Kasurjulla Mahendra	109/13	DMRC PHASE III
91.	Amresh Kumar	110/13	DMRC PHASE III
92.	Rohit Kumar	111/13	RISING AND MAINTENANCE OF ASH DUKE NTPC VIDYANCHAL
93.	Jitendra Singh	112/13	RISING AND MAINTENANCE OF ASH DUKE NTPC VIDYANCHAL
94.	HJimanshu Choudhry	114/13	CONSTRUCTION OF

			UNDERGROUND STATION AND TUNNEL ,J KUMAN DELHI
95.	Sanjeev Kumar	115/13	DMRC PHASE III
96.	Mohd Altaf Shah	116/13	FLYOVER RAMBHAG JK ERA

Table B.2.2.5b

**Details of the Students who have undergone Industrial Training of more than 2-weeks-  
Batch 2014-2018**

S.No	Name Of The Student	En.No	Particulars of Practical Training
1.	Haris Wajeed Mir	01/14	CONSTRUCTION OF BRIDGE, GANDERBAL, JKPDC
2.	Ms. Suhaila Anjum	03/14	CONSTRUCTION OF 96 FLATS ALONG WITH COMMUNITY AND MARRIAGE HALL, JKPC
3.	Ms. Seerat Malik	04/14	JKPCC LIMITED SRINAGAR
4.	Easeel Ahmad Dar	05/14	CONSTRUCTION OF AUDITORIUM HALL, R AND B SRINAGAR
5.	Ms. Faakhirah Rashid Mir	07/14	JKPCC LIMITED SRINAGAR
6.	Ubaid Hyder Mir	08/14	CONSTRUCTION OF FLYOVER EXPRESSWAY CORRIDOR BY ERA
7.	Majid Mohi-Ul-Din	09/14	JKPCC LIMITED SRINAGAR
8.	Dachen Dawa	11/14	CONSTRUCTION OF BOYS HOSTEL GMC, JAMMU, JKPC
9.	Shahiq Ahmad Wani	12/14	CONSTRUCTION OF WATALBAGH, BRIDGE, JKPC, GANDERBAL
10.	Ms.Suzeena Iftikhar	13/14	
11.	Syed Abdul Mateen	14/14	BEIGH CONSTRUCTIONS CO. PVT. LTD. BY PASS JAMMU.
12.	Salman Sadat Dar	15/14	SURVEYING AND ESTIMATION OF A 2.5KM ROAD, PWD, J AND K
13.	Ms. Insha Muzaffar	16/14	JKPCC LIMITED JAMMU
	Malik		
14.	Atti-Ur-Rahman	17/14	JKPCC LIMITED JAMMU
15.	Dheeraj Kumar	19/14	JKPCC LIMITED JAMMU
16.	Imtiyaz Ahmad Ahanger	20/14	SALAL POWER PROJECT, NHPC
17.	Zubair Zahoor Bandey	21/14	CONSTRUCTION OF AUDITORIUM AT RAJBHAWANR&BSRINAGAR
18.	Housher Ahmad Malik	22/14	JKPCC LIMITED JAMMU
19.	Pankaj Kundal	23/14	JKPCC LIMITED JAMMU
20.	Muheeb Majid Najar	24/14	NEW AUSTRIAN TUNNELING METHOD, AFCONS
21.	Mugees Tahoor	25/14	NEW AUSTRIAN TUNNELING METHOD, AFCONS
22.	Mohd Haseeb Shora	26/14	NEW AUSTRIAN TUNNELING METHOD, AFCONS
23.	Mohd Iqbal	27/14	CONSTRUCTION OF NEW LEGISLATIVE ASSEMBLY COMPLEX AT JAMMU , JKPC
	Mehboob Ali Khan	28/14	CONSTRUCTION OF NEW

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24.			LEGISLATIVE ASSEMBLY COMPLEX AT JAMMU , JKPC
25.	Anies Ul Amin	29/14	PWD (R&B) SRINAGAR
26.	Owais Saleem	30/14	PARNATHYDRO ELECTRIC PROJECT SURENKOTPOONCH.
27.	Amarjeet Singh	31/14	JKPC LIMITED JAMMU
28.	Suhail Yaqoob	32/14	PWD (R&B) SRINAGAR
29.	Vimal Jeet Khajura	33/14	CONSTRUCTION OF 300M PRE-STRESSED CONCRETE BRIDGE, PCC, JAMMU
30.	Aaqil Rashid Baht	35/14	CONSTRUCTION OF SCHOOL BUILDING, PWD,ANANTNAG
31.	Anup Kumar	36/14	ERA
32.	Adil Rasool Kumar	37/14	CONSTRUCTION OF CENTRAL UNIVERSITY, JAMMU, SEW, INFRASTRUCTURE
33.	Sudhanshu Mahajan	38/14	PARNATHYDRO ELECTRIC PROJECT SURENKOTPOONCH.
34.	Dhruv Tadwal	39/14	JKPC LIMITED JAMMU
35.	Aaqif Yousf Bhat	40/14	CONSTRUCTION OF 300M PRE-STRESSED CONCRETE BRIDGE, PCC, JAMMU
36.	Ranjeet Kumar Thapa	41/14	CONSTRUCTION OF CENTRAL UNIVERSITY, JAMMU, SEW, INFRASTRUCTURE
37.	Shubam Mahajan	43/14	CONSTRUCTION OF 300M PRE-STRESSED CONCRETE BRIDGE, PCC, JAMMU
38.	Vinod Kumar	44/14	LUCKNOW METRO, L AND T PVT LIMITED
39.	Gurtej Singh	45/14	JKPC LIMITED JAMMU
40.	Himanshu Roy	46/14	SALAL POWER PROJECT, NHPC
41.	Zakir Hussain	47/14	SPACEENGINEERS CONSORTIUM PVT. LTD.SRINAGAR
42.	Pushep Kumar	49/14	JKPC LIMITED JAMMU
43.	Purushesh Naad	50/14	LOWER KALNAIHYDRO ELECTRIC PROJECT , JKPC
44.	Abdul Basit Khan	51/14	SPACEENGINEERS CONSORTIUM PVT. LTD.SRINAGAR
45.	Vishal Tiku	52/14	DY. PROJECT MANAGER , JKUSDIP (WS-02) ERA JAMMU
46.	Mohammad Shamsul Haq	53/14	SPACEENGINEERS CONSORTIUM PVT. LTD. SRINAGAR
47.	Naveed Ul Hassan	54/14	37.5MW PARNAI, HEP, POONCH, JKSPDC
48.	Muiz Ahmed Bhat	55/14	PARNAI HEP, JKSPDC
49.	Amir Aziz Sheikh	57/14	-DO
50.	Sheikh Aquib	59/14	CONSTRUCTION OF 300M PRE STRESSED BRIDGE, ECC

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51.	Piyush Kumar Vaibshy	60/14	LUCKNOW METRO, L AND T PVT LIMITED
52.	Chandra Kant Bhaskar	61/14	CONSTRUCTION OF AN EDUCATIONAL BUILDING, PWD, UP
53.	Devendra Meena	62/14	DESIGN OF A HOSTEL BUILDING, CPWD, JAIPUR
54.	Bal Gopal Nagar	63/14	MNIT, JAIPUR RAJASTAN
55.	Vikram Jeet Singh	64/14	SALAL POWER PROJECT, NHPC
56.	Pankaj Kumar	65/14	SALAL POWER PROJECT, NHPC
57.	Raj Kumar Chotla	66/14	HYDRO-ELECTRIC POWER PROJECT ON LOWER KALNAINALLA
58.	Anoop Yadar	68/14	HYDRO-ELECTRIC POWER PROJECT ON LOWER KALNAINALLA
59.	Naveed Murtaza Gulzar	69/14	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT, PWD, UP
60.	Bhanu Pratap Singh	70/14	DESIGN OF A HOSTEL BUILDING, CPWD, JAIPUR
61.	Sunidhi Supriya	72/14	DESIGN OF AN INSTITUTIONAL BUILDING, CWD ,KOTA
62.	Prashant Mishra	77/14	DESIGN OF A HOSTEL BUILDING, CPWD, JAIPUR
63.	Himanshu Gujar	78/14	DESIGN OF AN INSTITUTIONAL BUILDING, CWD ,KOTA
64.	Prakhar Kanaujra	79/14	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT, PWD, UP
65.	Avinash Kajla	80/14	DY. CHIEF ENGINEER CONSTRUCTION DIV-I NORTH WESTERN RAILWAY, JAIPUR
66.	Azad Ahmed	83/14	DEVELOPMENT OF ROADS FOR CENTRAL UNIVERSITY JAMMU, SEW INFRASTRUCTURE
67.	Prem Singh Meena	86/14	DESIGN OF A HOSTEL BUILDING, CPWD, JAIPUR
68.	Meshrai Singh	87/14	DESIGN OF A HOSTEL BUILDING, CPWD, JAIPUR
69.	Jagdish Kumar Kasaushan	89/14	CENTRAL TOOL ROOM AND TRAINING CENTRE BUBNESHWAR
70.	Shankar Kumar	90/14	CENTRAL TOOL ROOM AND TRAINING CENTRE BUBNESHWAR
71.	Bharat Jaysewal	91/14	DESIGN OF AN OFFICE BUILDING, PWD JAIPUR
72.	Sunil Kumar Chahar	92/14	LUCKNOW METRO RAIL PROJECT, LMRC
73.	Adarsh Sehu	93/14	LUCKNOW METRO RAIL PROJECT, LMRC
74.	Amit Kumar	95/14	PROJECT OF ROAD AND BUILDING WORKS, PWD, JHUNJHUNU
75.	Avadhesh Kumar	96/14	CONSTRUCTION OF ROAD, PWD
76.	Gulshan Gared	97/14	CONSTRUCTION OF GOPALAM BUILDING , PWD, JAIPUR

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77	Sunil	98/14	PWD DIVISION, SIKAR
78	Narendra Kumar	100/14	PWD DIVISION, SIKAR
79	Deepak	101/14	DESIGN OF AN EDUCATION BUILDING, PWD SUB DN-II JHUNJHUNU
80	Gaurav Kumar	104/14	CONSTRUCTION OF FLYOVER FROM MITHAPPUR TO CHIRAIYATANT, BRPNL, PATNA
81	Suneel Kumar	105/14	LUCKNOW METRO RAIL PROJECT, LMRC
82	Neeraj Agrahari	106/14	LUCKNOW METRO RAIL PROJECT, LMRC
83	Prakesh Kumar	108/14	CONSTRUCTION OF FLYOVER FROM MITHAPPUR TO CHIRAIYATANT, BRPNL, PATNA
84	Deepak Kr Jha	110/14	
85	Shubham Jain	111/14	MANAGING DIRECTOR, BIHARRAJYAPULNIRMANNIGRAM LTD. PATNA.
87	Dinesh	112/14	AAI, NEW DELHI
88	Daksh Jain	113/14	AAI, NEW DELHI
89	Vipin Vijay	114/14	LUCKNOW METRO RAIL PROJECT, LMRC
90	Mir Fazian Farooq	115/14	ANALYSIS AND DESIGN OF MULTI STOREY RESIDENTIAL BUILDING, CADD TRAINING SERVICE CENTER AWANTIPORA
91	Sanjiv Kumar Bhargeva	116/14	D.T.T.D.C.LTD. MAJNUKATILA OUTER RING ROAD, DELHI.
92	Sonu Kumar	117/14	AAI, NEW DELHI
93	Jagdish Paliwal	118/14	LUCKNOW METRO RAIL PROJECT, LMRC
94	Shivdar	119/14	L AND T LIMITED CONSTRUCTION DIVISION HYDERABAD.
95	Mohd Ilyas Bhat	120/14	ANALYSIS AND DESIGN OF MULTI STOREY RESIDENTIAL BUILDING, CADD TRAINING SERVICE CENTER AWANTIPORA
96	Vaibhav Gupta	121/14	LUCKNOW METRO RAIL PROJECT, LMRC
97	Paras Rathore	122/14	CONSTRUCTION OF FOUR LANE, ROB IN LIEU OF RUB B-72, JODHPUR DEVELOPMENT AUTHORITY
98	Anupem Kumar	123/14	LUCKNOW METRO RAIL PROJECT
99	Devesh Soni	635/14	HIGH LEVEL BRIDGE PARALLEL TO KOTA BARRAGE ACROSS RIVER CHAMBAL, UIT, KOTA
100	Anil Kumar	636/14	L AND T LIMITED CONSTRUCTION DIVISION HYDERABAD.

Criterion 2

101	Md. Sarfaraz Reyaz	637/14	D.T.T.D.C.LTD. MAJNUKATILA OUTER RING ROAD, DELHI.
102	Katiki Reddy Pravallika Reddy	638/14	LAND T LIMITED CONSTRUCTION DIVISION HYDERABAD.
103	Amit Shukla	639/14	AAI,NEW DELHI
104	Aditya Prakash	640/14	CONSTRUCTION OF FLYOVER, BRPNN, PATNA
105	Mohd Rizwan	641/14	NOIDA METRO PROJECT, DRMC, NEW DELHI
106	Pushkar Pretap Singh	642/14	NOIDA METRO PROJECT, DMRC, NEW DELHI
107	Ravindra Singh	643/14	NOIDA METRO PROJECT, DRMC, NEW DELHI
108	Mohd Asif Khan	644/14	CONSTRUCTION OF SIGNATURE BRIDGE, DTTDC, NEW DELHI
109	Amit Kumar	645/14	PWD DIVISION, SIKAR
110	Ashok Shaima	646/14	PWD DIVISION –II JAIPUR
111	Moin Khan	647/14	LAND T LIMITED CONSTRUCTION DIVISION HYDERABAD.
112	Krishna Singh	648/14	CONSTRUCTION OF ROAD CPW, SIKAR
113	Prashent Kumar Bhardwaj	649/14	AAI,NEW DELHI
114	Lovekush Kumar	650/14	CONSTRUCTION OF ROAD CPW, SIKAR
115	Asif Jeelani Bhat	651/14	JKPCC, SRINAGAR
116	Anayat Bahsir	652/14	CONSTRUCTION OF ROAD CPW, SIKAR
117	Lala Musediq Abbas Shabir	653/14	PWD DIVISION –II JAIPUR
118	Basiq Naseer Khan	654/14	SALAL POWER PROJECT, NHPC
119	Shasti Jan	41/13-14	SALAL POWER PROJECT, NHPC

**Table B.2.2.5c**

**Details of the Students who have undergone Industrial Training of more than 2-weeks**

**Batch: 2015-2019**

S.No	Name of The Student	En. No	Particulars of Practical Training
01.	Aayat Abid Kamli	Civ/02/15	INTEGRATED MANAGEMNT SYSTEM PROCEDURESERA, SNC LAVALIN
02.	Zahid Parvaiz	Civ/03/15	CONSTRUCTION OF A FLYOVER, JKERA
03.	Afaan Bilal	Civ/04/15	CONSTRUCTION OF ELEVATED EXPRESSWAY COORIDOOR, SRINAGAR, JKERA
04.	Kriti Dhiman	Civ/05/15	CIVIL ENGINEERING WORK PRACTICES, AAI NEW DELHI

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05.	Zarnain Fayaz	Civ/06/15	REDEVELOPMENT OF KIDWA NAGAR NEW DELHI, NBCC
06.	Mohd Younis Hajam	Civ/07/15	CONSTRUCTION OF BRIDGE, JKPWD PULWAMA
07.	Samma Malik	Civ/08/15	CONSTRUCTION OF MIGRANT COLONY, BUDGAM, JKPC
08.	Faheem Farooq Reshi	Civ/09/15	CONSTRUCTION OF A FLYOVER, JKERA
09.	Hanan Shawal	Civ/10/15	CONSTRUCTION OF A FLYOVER, JKERA
10.	Bazela Manzoor	Civ/11/15	CONSTRUCTION OF A FLYOVER, JKERA
11.	Vishav Jeet	Civ/12/15	CONSTRUCTION OF LINK TAXI HELICOPTER PARKING, JAMMU AIRPORT
12.	Faisal Firdous	Civ/14/15	CONSTRUCTION OF A FLYOVER, JKERA
13.	Muzamil Shafi Wani	Civ/15/15	CONSTRUCTION OF A FLYOVER, JKERA
14.	Aamir Suhail Hajam	Civ/16/15	CONSTRUCTION OF CULVERTS, PWD QAZIGUND
15.	Khushnuma Mushtaq	Civ/17/15	WESTERN REGION PIPELINE PROJECT, IOCL
16.	Haroon Rashid	Civ/18/15	CONSTRUCTION OF A FLYOVER, JKERA
17.	Khalid ur Rehman	Civ/19/15	CONSTRUCTION OF BRIDGE, SHARIFABAD, BEMINA, JKPC
18.	Sarthak Navesh	Civ/20/15	CONSTRUCTION OF GIRLS HOSTEL, GMC JAMMU, JKPC
19.	Wasim Ahmad Katariya	Civ/21/15	CONSTRUCTION OF A FLYOVER, JKERA
20.	Irum Qadir	Civ/22/15	CONSTRUCTION OF A FLYOVER, JKERA
21.	Basit Tariq Guhnow	Civ/23/15	CONSTRUCTION OF A FLYOVER, JKERA
22.	Asmat Nabi	Civ/24/15	CONSTRUCTION OF A FLYOVER, JKERA
23.	Rohit Kumar Bhagat	Civ/25/15	CONSTRUCTION OF BRIDGE, JAMMU, JKPC
24.	Shahrukh Saleem	Civ/26/15	CONSTRUCTION OF BRIDGE, JAMMU, JKPC
25.	Shakir Ahmad Tarray	Civ/27/15	CONSTRUCTION OF A FLYOVER, JKERA
26.	Aqib Assad	Civ/28/15	CONSTRUCTION OF A FLYOVER, JKERA
27.	Nasier Hussain	Civ/29/15	CONSTRUCTION OF A FLYOVER, JKERA
28.	Tawseef Iqbal	Civ/30/15	CONSTRUCTION OF BRIDGE, SHARIFABAD, BEMINA, JKPC
29.	Amir Farooq Shah	Civ/31/15	CONSTRUCTION OF A FLYOVER, JKERA
30.	Haidayatullah	Civ/32/15	CONSTRUCTION OF ADDITIONAL BLOCK OF GDC JAMMU, JKPC

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31.	Sunil Kumar	Civ/33/15	CONSTRUCTION OF GIRLS HOSTEL, SKAUST JAMMU
32.	Jatin Siddhartha	Civ/35/15	TRACK MAINTENANCE IN SUB URBAN SECTIONS, WESTERN RAILWAYS
33.	Pardeep Kumar	Civ/36/15	BUILDING CONSTRUCTION PROJECT, JKPWD
34.	Mahesh Kumar	Civ/37/15	BUILDING CONSTRUCTION PROJECT, JKPWD
35.	Liyaqat Ali	Civ/38/15	BUILDING CONSTRUCTION PROJECT, JKPWD
36.	Pirzada Uzair	Civ/39/15	CONSTRUCTION OF BRIDGE, SHARIFABAD, BEMINA, JKPC
37.	Akhil Kumar Bhagat	Civ/40/15	CONSTRUCTION OF GIRLS HOSTEL, SKAUST JAMMU
38.	Junaid Ahmad Najar	Civ/41/15	CONSTRUCTION OF A FLYOVER, JKERA
39.	Tsering Youtan	Civ/42/15	CIVIL ENGINEERING WORK PRACTICES, AAI NEW DELHI
40.	Mudasir Ahmad Zaki	Civ/43/15	CONSTRUCTION OF A FLYOVER, JKERA
41.	Kunal Dogra	Civ/44/15	CONSTRUCTION OF GIRLS HOSTEL BUILDING JAMMU, JKPC
42.	Irfan Ahmad Kumar	Civ/45/15	CONSTRUCTION OF A FLYOVER, JKERA
43.	Rafiq Ahmad	Civ/46/15	CONSTRUCTION OF A MULTI STOREYED BUILDING (G+7) DD BUILDERS
44.	Imtiyaz Gul	Civ/49/15	CONSTRUCTION OF A FLYOVER, JKERA
45.	Hilal Ahmad Najar	Civ/51/15	CONSTRUCTION OF A FLYOVER, JKERA
46.	Muzamil Hassan	Civ/52/15	CONSTRUCTION OF A FLYOVER, JKERA
47.	Adfar Aaghaz Mir	Civ/53/15	CONSTRUCTION OF A FLYOVER, JKERA
48.	Abhi Atri	Civ/54/15	WRITERS CLUB BUILDING CONSTRUCTION PROJECT, R&B JAMMU
49.	Veenu Thappa	Civ/55/15	CONSTRUCTION OF A MULTI STOREYED BUILDING (G+7) DD BUILDERS
50.	Nasir Ahmad Ahanger	Civ/57/15	CONSTRUCTION OF ELEVATED EXPRESSWAY COORIDOOR, SRINAGAR, JKERA
51.	Joseph Nicholas Jaideep	Civ/58/15	CONSTRUCTION STAGE ANALYSIS AND EXECUTION STUDY OF PRE-CAST SEGMENTED EXTRA DOSED, BARAPULLAH BRIDGE, L&T
52.	Bharat Gupta	Civ/59/15	FUNCTIONS OF ONGC IN CIVIL ENGG, ONGC
53.	Fuzail Showkat Wani	Civ/60/15	CONSTRUCTION OF ELEVATED EXPRESSWAY COORIDOOR, SRINAGAR,

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			JKERA
54.	Ishan Gautam	Civ/61/15	WESTERN REGION PIPELINE PROJECT, IOCL
55.	Shivendra Sahai	Civ/62/15	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT, UPPWD
56.	Rohtan Singh	Civ/63/15	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT, UPPWD
57.	Jogeshvar Bhindrar	Civ/65/15	DESIGN OF A RESIDENTIAL BUILDING, PWD RAJASTHAN
58.	Rohini Angral	Civ/66/15	CONSTRUCTION OF A MULTI STOREYED BUILDING (G+7) DD BUILDERS
59.	Ashish Meena	Civ/67/15	DESIGN OF A RESIDENTIAL BUILDING, PWD RAJASTHAN
60.	Paul F Gaisal	Civ/68/15	CONSTRUCTION OF A FLYOVER, JKERA
61.	Sajad Ahmad Malla	Civ/73/15	CONSTRUCTION OF A FLYOVER, JKERA
62.	Sahil Sharma	Civ/74/15erz	GOVT. HOSPITAL CONSTRUCTION PROJECT, JKPC
63.	Iftikhar Gojri	Civ/76/15	CONSTRUCTION OF ELEVATED EXPRESSWAY COORIDOR, SRINAGAR, JKERA
64.	Waseem Ahmad Bhat	Civ/77/15	CONSTRUCTION OF FLYOVER FROM JAHANGIR CHOWK TO RAMBAGH, JKERA
65.	Updesh Kumar	Civ/80/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
66.	Abhishek Panday	Civ/84/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
67.	Ritika Mongra	Civ/86/15	CONSTRUCTION OF A MULTI STOREYED BUILDING (G+7) DD BUILDERS
68.	MD Firoz Alam	Civ/93/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
69.	S. Mehran Rasool Andrabi	Civ/94/15	CONSTRUCTION OF FLYOVER FROM JAHANGIR CHOWK TO RAMBAGH, JKERA
70.	Nitesh Kumar Meena	Civ/98/15	DESIGN OF A RESIDENTIAL BUILDING, PWD RAJASTHAN
71,=.	Sharda Khande	Civ/104/15	CONSTRUCTION OF VILLAGE ROAD BRIDGE, RAIGARH CHATTISGARH
72.	Alahari Jayanth	Civ/105/15	FUNCTIONS OF ONGC IN CIVIL ENGG, ONGC
73.	Aman Kumar	Civ/106/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
74.	Ankit Kumar	Civ/107/15	CONSTRUCTION OF A BUILDING, PWD RAJASTHAN
75.	Sahil	Civ/108/15	GOVT. HOSPITAL CONSTRUCTION PROJECT, JKPC

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76.	Anand Kumar	Civ/109/15	METRO RAILWAY STATION CONSTRUCTION, DMRC
77.	Money Gupta	Civ/110/15	CONSTRUCTION OF CEMENT CONCRETE PAVEMENT, MPRRDA
78.	Vivek Kumar Yada	Civ/111/15	PARBATI HYDROELECTRIC PROJECT STAGE-III, KULLU
79.	Devendra Kumar Tiwari	Civ/112/15	CONSTRUCTION OF RESIDENTIAL TOWNSHIP, NCL SINGRAULI
80.	Shailendra Singh	Civ/113/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
81.	VinitJangir	Civ/114/15	DESIGN OF A RESIDENTIAL BUILDING, PWD RAJASTHAN
82.	Shubham Kumar Jangir	Civ/115/15	CONSTRUCTION OF A BUILDING, PWD RAJASTHAN
83.	Diryanshu Nath Tripathi	Civ/116/15	OBRA COAL FIRED THERMAL POWER PROJECT, UPRVONL
84.	Ritik Sharma	Civ/117/15	PRE- FEASIBILITY REPORT FOR AIRPORT EXPANSION, IGI AIRPORT NEW DELHI
85.	Markandey Rai	Civ/118/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
86.	Ravi Kumar Verma	Civ/119/15	DESIGN OF A RESIDENTIAL BUILDING, PWD RAJASTHAN
87.	Rahul	Civ/120/15	RAILWAY BRIDGE CONSTRUCTION
88.	Sunil Kumar Patel	Civ/121/15	CONSTRUCTION OF BRIDGES, DMRC
89.	Abhishek Gourav	Civ/122/15	PARBATI HYDROELECTRIC PROJECT STAGE-III, KULLU
90.	MD Fasihur Rahman	Civ/123/15	DELHI METRO RAIL PROJECT, CC94 NOIDA
91.	Vikas Chandra	Civ/124/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
92.	Yashawant Dhayal	Civ/125/15	DESIGN AND CONSTRUCTION OF A BUILDING, PWD
93.	Pranjil Chaluhan	Civ/127/15	CONSTRUCTION STAGE ANALYSIS AND EXECUTION STUDY OF PRE-CAST SEGMENTED EXTRA DOSED, BARAPULLAH BRIDGE, L&T
94.	Damini Pandit	Civ/128/15	ELITA GARDEN VISTA PROJECT-PHASE-II, SIMPLEX INFRASTRUCTURES LTD.
95.	Sunil Dhaker	Civ/129/15	DESIGN OF A RESIDENTIAL BUILDING, JAIPUR
96.	Akash Yadav	Civ/130/15	DESIGN OF A BUILDING CONSTRUCTION , PWD CHURU
97.	Anuraqg Kumar	Civ/131/15	CONSTRUCTION OF METRO STATION, LUCKNOW METRO CORPORATION
98.	Aman Srivastava	Civ/132/15	REDEVELOPMENT OF KIDWA
			NAGAR NEW DELHI, NBCC
99.	Kuldeep Chauhan	Civ/133/15	DESIGN OF A BUILDING CONSTRUCTION, PWD CHURU

100.	Manishg Kumar	Civ/134/15	CONSTRUCTION OF GANGA PATH, BSRDC, BIHAR
101.	Akshay Saxena	Civ/135/15	WTP, RO PLANT AND STP AT JUBILEE TOWER NOIDA, GAIL LTD.
102.	Rishabha Tiwar	Civ/136/15	URBAN ELECTRIFICATION OF KANPUR CITY, IPDS KANPUR
103.	Anshu Agarwal	Civ/137/15	DESIGN AND CONSTRUCTION OF A BUILDING, PWD CHURU
104.	Yogesh Kumar	Civ/138/15	PARBATI HYDROELECTRIC PROJECT STAGE-III, KULLU
105.	Anil Kumar Yadavq	Civ/139/15	FUNCTIONS OF ONGC IN CIVIL ENGG, ONGC
106.	Vinold Chaudhary	Civ/140/15	PROVISION OF INFRASTRUCTURE WORK, CP&B PVT. LTD ASSAM
107.	Raghuvendra Pratap Singh	Civ/141/15	SCHOOL BUILDING CONSTRUCTION, NULINE CONSTRUCTION, BHOPAL
108.	Shnu Kumar	Civ/142/15	PANORAMA SQUARE, SIMANCHAL INFRATECH PVT. LTD
109.	Rishabh Sahu	Civ/143/15	URBAN ELECTRIFICATION OF KANPUR CITY, IPDS KANPUR

**Table B.2.2.5d**

Post training assessment of the practical training is evaluated at the end of the 7th semester, by a committee constituted by the HOD. It carries 2 credits. The students give a PPT wherein they give a detailed report of the work done. The presentation is followed by an interaction session. The students are compulsorily supposed to submit a hard copy of the work done and is maintained in department as record. The credits are awarded based on the presentation, interaction and the practical training record.

For the academic year 2020-21 due to Covid-19 pandemic students have not participated in the two week Internship Programme and have rather opted for research based online internships.

### **C. Impact analysis of industrial training (02)**

The students are provided with the feedback forms to rate their industrial training/internship. It is done to identify the level of achievement.

The feedback is obtained from the students at the end of 7th semester to assess the achievement of the objectives of the industrial training/ summer training/internship/ industrial tour.

Due to the COVID-19 pandemic and other administrative lockdown in the UT of Jammu and Kashmir, the mode of generating feedback from students was changed from offline to online for Autumn 2019 onwards. The platform of google forms was utilized by sending the links of each specific form to all students and hence the data was gathered therefrom.

<b>Department of Civil Engineering</b>									
<b>Feedback Form to Assess the Industrial Training</b>									
<b>Name of the student:</b>					<b>Enrollment No :</b>				
<b>1. Rank the departmental initiative about the seriousness regarding industrial training etc. :</b>									
<b>Excellent</b>	<input type="checkbox"/>	<b>Good</b>	<input type="checkbox"/>	<b>Average</b>	<input type="checkbox"/>	<b>Fair</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. Rate the faculty help you got in choosing the proper place for the training:</b>									
<b>Excellent</b>	<input type="checkbox"/>	<b>Good</b>	<input type="checkbox"/>	<b>Average</b>	<input type="checkbox"/>	<b>Fair</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Rate the exposure you got to the practical working environment:</b>									
<b>Excellent</b>	<input type="checkbox"/>	<b>Good</b>	<input type="checkbox"/>	<b>Average</b>	<input type="checkbox"/>	<b>Fair</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4 Did you become aware about the practical aspects of civil engineering during the training: Yes/No</b>									
<b>5 Did you notice some interesting facts and new technologies during the training:</b>									
<b>6 Would you suggest your juniors to undergo training there: Yes/No</b>									
<b>7. Suggestions which will make such training more useful and interesting:</b>									

*Table B.2.2.e*

**D. Student feedback on initiative (02)**

**(Analysis of Students feedback on initiative (industrial training))**

The student's feedback is obtained and evaluated corrective action is taken accordingly. The action includes:

1. To identify the project sites where students would be deputed.
2. If the students are not satisfied with the training imparted at a particular project/work, the students are not deputed to undergo training in at such projects in future.