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|  |  | Bachelor of Technology in Civil Engineering (with Specialization)Department of Civil and Environmental Engineering (2020-21) |
| Semester  |    |    |    |    |    |    |    |  |    | Community Services | L | T | P | Contact hoursper week | Credits  |
| I | MAL151Engineering Maths-I(3-0-2) 4 | CHL150Engg. Chemistry(2-0-2) 3 | CLL101Eff. Comm.-I(2-0-1) 2.5 | CSL106FOCP-I(2-0-4) 4 | MEP110Engg Graphics & Drg(1-0-4) 3 | ECL110Basics of Electrical & Electronics Engg.(2-0-2) 3 |  |  | CER101General Proficiency (1) | CES101CS-I(S/NS)(70 hours) | 13 | 0 | 15 | 28 | 19.5 + 1= 20.5 |
| II | MAL152Engineering Maths-II(3-0-2) 4 | PYL150Engineering Physics(3-0-2) 4 | CLLl02.Eff. Comm.-II(2-0-1) 2.5 | CSL108FOCP-II(2-0-4) 4 | MEL150Basics of Mechanical and Civil Engineering(2-0-2) 3 | CSL110Problem Solving and design thinking(2-0-2) 3 |  |  | CER102General Proficiency (1) | CES102CS-II(70 hours)(2) | 15 | 0 | 13 | 28 | 20.5 + 3= 23.5 |
|  | CET102 In house Summer training (2 weeks)/ Community Service (Remaining Hours) |  |  |  |  |  | 01 |
| III | CEL 201Mechanics of Solids3-0-2(4) | CEL203Fluid Mechanics3-0-2(4) | CEL205Surveying3-0-2(4) | CEL215Building Materials and Construction3-0-2(4) | SML300Entrepreneurship3-0-0 (3) |  | CLL 120/ SML\*\*\*HVPE/ Liberal Arts(2-0-0/3-0-0) 2/3 |  | CER201General Proficiency(1) | CES201CS-III(S/NS)(35 Hours) | 19 | 0 | 8 | 27 | 22 + 1= 23 |
| IV | CEL202Structural Analysis I3-0-2(4) | CEL206Environmental Engineering3-0-2(4) | CEL311Soil Mechanics3-0-2(4) | CEL214Design ofConcrete Structures3-0-2 (4) | PE-1(3) |  |  | Skill Development(1) | CER202General Proficiency(1) | CES202CS-IV(35 hours)(1) | 15 | 2 | 6 | 23 | 20 + 2= 22 |
| Summer | CET212 Survey Camp with Software application (2 weeks) + Practical Training/Software (4 weeks) + Community Service (70 hours) |  |  |  |  |  | 02 |
| V | CEL301Structural Analysis II2-1-0(3) | CEL212Transportation Engineering3-0-2(4) | CEL315Design ofSteel Structures3-0-2(4) | PE-2(3) | PE-3(3) | OE-1(MOOC)(3) | CLL 120/ SML\*\*\*HVPE/ Liberal Arts(2/3) |  | CER301General Proficiency(1) | CES301CS-V(S/NS)(35 hours) | 20 | 1 | 4 | 25 | 22 + 1= 23 |
| VI | CEL303Water Resource Engineering3-0-0(3) | CEL222Construction Management3-0-0(3) | CEL318Earthquake Resistant Design of Structures2-1-0 (3) | PE-4(3) | PE-5(3) | OE-2(MOOC)(3) | CLP 300Campus to Corporate0-0-2(1) | Seminar(1) | CER302General Proficiency(1) | CES302CS-VI(35 hours)(1) | 17 | 1 | 6 | 24 | 20 + 2= 22 |
| Summer | CET 330 Practical Training-II @ construction site (8-10 weeks) + Community Service (70 hours) |  |  |  |  |  | 03 |
| VII | Foreign Language(3-0-0) 3 | CHL100Environmental Studies3-0-0(3) |  | PE-6(3) | PE-7(3) | OE-3(MOOC)(3) | CED304Major Project(A)0-0-8(4) | Skill Development(1) |  | CES401CS-VII(S/NS)(70 hours) | 15 | 0 | 12 | 27 | 20  |
| VIII |  |  |  |  | OE-4(MOOC)(3) | OE-5(MOOC)(3) | CED405Major Project (B) / Pre-Placement Internship0-0-12(6) | SEG400Self-Study Course GATE(Audit) |  | CES402CS-VIII(70 hours)(2) | 6 | 0 | 12 | 18 | 12 + 2= 14 |
| TOTAL |  |  |  |  |  | 162 + 12 = **174** |
| \*Blended course(s) equivalent to 6 credits will be offered as MOOCs on platforms like SWAYAM, Coursera, NPTEL, edX etc. with 1 facilitation hour by internal faculty |

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|  |  | Bachelor of Technology in Civil Engineering (with Specialization)Department of Civil and Environmental Engineering (2019-20) |
| Semester  |    |    |    |    |    |    |    |  |    | Community Service | L | T | P | Contact hoursper week | Credits  |
| I | MAL151Engineering Maths-I(3-0-2) 4 | CHL150Engg. Chemistry(1-0-2) 2 | CLL101Eff. Comm.-I(2-0-0) 2 | CSL106FOCP-I(2-0-6) 5 | MEP110Engg Graphics & Drg(1-0-3) 2.5 | CLL 120Human Values and professional Ethics(1-0-1) 1.5 | CSL110Problem Solving and design thinking(0-0-4) 2 |  | CER101GP(1) |  | 10 | 0 | 18 | 28 | 20 |
| II | MAL152Engineering Maths-II(3-0-2) 4 | PYL150Engineering Physics(3-0-2) 4 | CLLl02.Eff. Comm.-II(2-0-0) 2 | CSL108FOCP-II(2-0-6) 5 | MEL150Basics of Mechanical  and Civil Engineering(2-0-2) 3 | ECL110Basics of Electrical & Electronics Engg.(2-0-2) 3 |  |  | CER102GP(1) |  | 14 | 0 | 14 | 28 | 22 |
|  | CET102 Summer Camp (2 weeks) |  |  |  |  |  | 02 |
| III | CEL 201Mechanics of Solids3-1-0(4) | CEL203Fluid Mechanics3-0-2(4) | CEL205Surveying 3-0-2(4) | CEL210Concrete Technology3-0-0 (3) | CEL215Building materials and construction3-0-0(3) | CHL100Environmental Studies3-0-0(3) |  |  | CER201GP(1) | CES201CS-III(S/NS)(35 Hours) | 18 | 1 | 4 | 23 | 21 + 1= 22 |
| IV | CEL202Structural Analysis-I3-1-0(4) | CEL206Environmental Engineering3-0-2(4) | CEL212Transportation Engineering3-0-0(3) | CEL214Design ofConcrete Structures3-1-0 (4) | PE-1 (3) | CEP202Material Testing Lab0-0-4 (2) |  | CEV202Value Addition Course (1) | CER202GP(1) | CES202CS-IV(35 hours)(1) | 15 | 2 | 6 | 23 | 21 + 2= 23 |
|  | CET212 Survey Camp with Software application (2 weeks) + Practical Training/Software (4 weeks) + Community Service (70 hours) |  |  |  |  |  | 02 |
| V | CEL301 Structural Analysis II3-1-0(4) | CEL311Soil Mechanics3-0-2(4) | CEL315Design of Steel Structures3-1-0(4) | OE-1 (3) | OE-2(Foreign Language)(3) | CEP302Computer Aided Design and Drawing0-0-2(1) |  |  | CER301GP(1) | CES301CS-V(S/NS)(35 hours) | 15 | 2 | 4 | 21 | 19 + 1= 20 |
| VI | CEL318Earthquake Resistant Design of Structures3-1-0 (4) | CEL303Water Resource Engineering3-0-0(3) | CEL222Construction Management3-0-0(3) | PE 2(3) | OE-3(3) | CLP 300Campus to Corporate0-0-2(1) | CEP 304Technical Skills 0-0-2(1) | CEP306Project Based Learning (Tinkering)(1) | CER302GP(1) | CES302CS-VI(35 hours)(1) | 15 | 1 | 4 | 20 | 19 + 2= 21 |
|  | CET 330 Practical Training-II @ construction site (8-10 weeks) + Community Service (70 hours) |  |  |  |  |  | 03 |
| VII | PE 3(3) | PE 4(3) | PE 5(3) | SML300Entrepreneurship3-0-0 (3) | OE-4(3) |  | CED304Major Project(A)0-0-8(4) | CEV401VA Course (1) | CER401GP(1) | CES401CS-VII(S/NS)(70 hours) | 15 | 0 | 8 | 23 | 20 + 1= 21 |
| VIII | \*PE 6 (3) | \*PE 7(3) |  |  |  |  | CED405Major Project (B) / Pre-Placement Internship0-0-12(6) | SEG400Self-Study Course GATE (Audit) | CER402GP(1) | CES402CS-VIII(70 hours)(2) | 6 | 0 | 12 | 18 | 12 + 3= 15 |
|   TOTAL |  |  |  |  |  | 159 + 12= **171** |
| \*Blended course(s) equivalent to 6 credits will be offered as MOOCs on platforms like SWAYAM, Coursera, NPTEL, edX etc. with 1 facilitation hour by internal faculty |

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|  |  | **Bachelor of Technology in Civil Engineering Department of Civil and Environmental Engineering (2018-19)** |
| **Semester** |  |  |  |  |  |  |  |  |  | Community Service | **L** | **T** | **P** | **Contact hours****per week** | **Credits** |
| **I** | MAL151Engineering Mathematics I3-0-2(4) | PYL150Engineering Physics3-0-2(4) | ECL110BEEE3-0-2(4) | MEL150Basics of Mechanical Engineering2-0-2(3) | CSL106FOCP-11-0-2(2) | CLL101EffectiveCommunication I1-0-2(2) |  |  | CER101General Proficiency (1) |  | 13 | 0 | 12 | 25 | 20 |
| **II** | MAL152Engineering Mathematics II3-0-2(4) | CSL108FOCP-II1-0-2(2) | CLL 120Human Values and professional Ethics2-0-0 (2) | MEP110Engineering Graphics &Drawing1-0-3(3) | CHL150Engineering Chemistry2-0-2 (3) | CLL102EffectiveCommunication II1-0-2(2) | CSL110Problem Solving and design thinking2-0-2(3) |  | CER102General Proficiency (1) |  | 12 | 0 | 13 | 25 | 20 |
|  | CET102 Summer Camp (2 weeks) |  |  |  |  |  | 02 |
| **III** | CEL 201Mechanics of Solids3-1-0(4) | CEL203Fluid Mechanics3-0-2(4) | CEL205Surveying 3-0-2(4) | CEL210Concrete Technology3-0-0 (3) | CEL215Building materials and construction3-0-0(3) | CHL100Environmental Studies3-0-0(3) |  |  | CER201General Proficiency (1) |  | 18 | 1 | 4 | 23 | 22 |
| **IV** | CEL202Structural Analysis-I3-1-0(4) | CEL206Environmental Engineering3-0-2(4) | CEL212Transportation Engineering3-0-0(3) | CEL214Design ofConcrete Structures3-1-0 (4) | PE-1 (3) | CEP202Material Testing Lab0-0-4 (2) |  | Value Addition Course (1) | CER202General Proficiency (1) |  | 15 | 2 | 6 | 23 | 22 |
| **Summer** | CET212 Survey Camp with Software application (2 weeks) + Practical Training/Software (4 weeks)  |  |  |  |  |  | 02 |
| **V** | CEL301 Structural Analysis II3-1-0(4) | CEL311Soil Mechanics3-0-2(4) | CEL315Design of Steel Structures3-1-0(4) | OE-1 (3) | OE-2(Foreign Language)(3) | CEP302Computer Aided Design and Drawing0-0-2(1) |  |  | CER301General Proficiency (1) | CES301CS-V(S/NS)(35 hours) | 15 | 2 | 4 | 21 | 19 + 1= 20 |
| **VI** | CEL318Earthquake Resistant Design of Structures3-1-0 (4) | CEL303Water Resource Engineering3-0-0(3) | CEL222Construction Management3-0-0(3) | PE 2(3) | OE-3(3) | CLP 300Campus to Corporate0-0-2(1) | CEP 304Technical Skills 0-0-2(1) | CEP306Project Based Learning (Tinkering)(1) | CER302General Proficiency (1) | CES302CS-VI(35 hours)(1) | 15 | 1 | 4 | 20 | 19 + 2= 21 |
| **Summer** | CET 330 Practical Training-II @ construction site (8-10 weeks) + Community Service (70 hours) |  |  |  |  |  | 03 |
| **VII** | PE 3(3) | PE 4(3) | PE 5(3) | SML300Entrepreneurship(3) | OE-4(3) |  | CED304Major Project(A)0-0-8(4) | Value Addition Course (1) | CER401General Proficiency (1) | CES401CS-VII(S/NS)(70 hours) | 15 | 0 | 8 | 23 | 20 + 1= 21 |
| **VIII** | \*PE 6 (3) | \*PE 7(3) |  |  |  |  | CED405Major Project (B) / Pre-Placement Internship0-0-12(6) | SEG400Self-Study Course GATE (Audit) | CER402General Proficiency (1) | CES402CS-VIII(70 hours)(2) | 6 | 0 | 12 | 18 | 12 + 3= 15 |
| **TOTAL** |  |  |  |  |  | **157+11=168** |
| \*Blended course(s) equivalent to 6 credits will be offered as MOOCs on platforms like SWAYAM, Coursera, NPTEL, edX etc. with 1 facilitation hour by internal faculty |
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|  | **University Level Courses** |  | **General Proficiency** |
|  | **Theory Courses** |  | **Open Elective courses** |
|  | **Lab Courses** |  | **Project based Learning** |
|  | **Program Elective Courses** |  | **Skill Development Courses** |

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