# UNIVERSIDAD DEL NORTE
## Curriculum of the Civil Engineering Program

| 1 SEMESTER | 2 SEMESTER | 3 SEMESTER | 4 SEMESTER | 5 SEMESTER | 6 SEMESTER | 7 SEMESTER | 8 SEMESTER | 9 SEMESTER | 10 SEMESTER |
|---|---|---|---|---|---|---|---|---|---|
| CALCULUS I-DIFFERENTIAL<br>MAT 1101 4 2 5 | CALCULUS II-INTEGRAL<br>MAT 1111 4 0 4<br>CALCULUS I | CALCULUS III-VECTOR<br>MAT 1121 4 0 4<br>CALCULUS II<br>LINEAR ALG | DATA ANALYSIS IN ENGINEERING I<br>EST 7042 3 2 4<br>CALCULUS II | BASIC SCIENCES ELECTIVE<br>ELG 0007 3 0 3 | PROJECTS FORMULATION AND EVALUATION<br>GPY 1012 3 0 3 | HIGHWAY DESIGN<br>ICI 4021 3 0 3<br>SURVEYING AND GEOMATICS | TRANSPORTATION ENGINEERING<br>ICI 7014 3 0 3<br>HIGHWAY DESIGN | PROFESSIONAL ELECTIVE I<br>ELG 1201 3 0 3 | CAPSTONE DESIGN<br>INV 7362 3 0 3<br>TRANSP. ENG<br>WATTER SUPPLY, WASTE<br>CONST CTROL MANG<br>COMP. EXAM II<br>LANGUAGE |
| ENGINEERING DRAWING<br>IBA 0022 2 2 3 | PHYSICS-MECHANICS<br>FIS 1023 3 2 4<br>CALCULUS I | PHYSICS-HEAT AND WAVES<br>FIS 1043 3 2 4<br>PHYSICS-MECHANICS<br>CALCULUS I | PHYSICS-ELECTRICITY<br>FIS 1033 3 2 4<br>PHYSICS-MECHANICS<br>CALCULUS II | BASIC PROFESSIONAL ELECTIVE<br>ELG 0008 2 2 3 | HISTORY ELECTIVE<br>ELG 1140 3 0 3 | CONSTRUCTION ENGINEERING<br>ICI 7081 3 0 3<br>CONSTRU. MAT | CONSTRUCTION CONTROL AND MANAGEMENT<br>ADM 5031 3 0 3<br>CONSTRU. ENG. | PROFESSIONAL ELECTIVE II<br>ELG 1202 3 0 3 | PROFESSIONAL ELECTIVE III<br>ELG 1203 3 0 3 |
| INTRODUCTION TO CIVIL ENGINEERING<br>ICI 0010 1 0 1 | ALGORITHMS AND PROGRAMMING I<br>IST 2088 2 2 3 | STATICS<br>IBA 4032 3 0 3<br>PHYSICS-MECHANICS | SOLIDS MECHANICS<br>IME 4200 3 0 3<br>STATICS | CONSTRUCTION MATERIALS<br>ICI 4051 2 2 3<br>SOLIDS MECHANICS | STRUCTURAL ANALYSIS<br>ICI 7104 3 0 3<br>SOLID MECHANICS<br>COMPR. EXAM I | STRUCTURAL DESIGN<br>ICI 7052 3 0 3<br>STRUC. ANA. | ENVIRONMENTAL ENGINEERING<br>ICI 8750 1 2 2 | COMPLEMENTARY FORMATION ELECTIVE I<br>ELP 4030 3 0 3 | COMPLEMENTARY FORMATION ELECTIVE II<br>ELP 8090 3 0 3 |
| LINEAR ALGEBRA<br>MAT 1031 3 0 3 | GENERAL CHEMISTRY<br>CSV 0020 3 0 3 | SURVEYING AND GEOMATICS<br>ICI 4011 2 2 3<br>ENG DRAW | GEOLOGY<br>ICI 4060 3 0 3 | COMPUTATIONAL SOLUTION OF ENGINEERING PROBLEMS<br>IST 4360 2 2 3<br>DIF EQUATIONS<br>ALGOR AND PROGR I | SOIL MECHANICS<br>ICI 4310 2 2 3<br>SOLID MECHANICS<br>GEOLOGY<br>COMP. EXAM I | FOUNDATIONS<br>ICI 7110 3 0 3<br>SOIL MECHANICS | ETHICS ELECTIVE<br>ELG 1170 3 0 3 | PHILOSOPHY ELECTIVE<br>ELG 1160 3 0 3 | HUMANITIES ELECTIVE<br>ELG 1130 3 0 3 |
| COMMUNICATION SKILLS I<br>CAS 3020 3 0 3 | COMMUNICATION SKILLS II<br>CAS 3030 3 0 3<br>COM. SKILLS I | DIFFERENTIAL EQUATIONS<br>MAT 4011 3 0 3<br>CALCULUS II | CARIBBEAN STUDIES ELECTIVE<br>ELG 1180 3 0 3<br><br>CAREER SEMINAR I<br>ICI 4320 0 1 0 | FLUIDS MECHANICS<br>IME 4070 3 0 3<br>DIF EQUATIONS<br><br>COMPREHENSIVE EXAM I<br>IIN 4311<br>DIF EQUATIONS<br>CALCULUS III<br>PHYSICS-HEAT AND WAVES<br>ALGOR AND PROGR I<br>PHYSICS - ELECTRICITY | HYDROLOGY<br>ICI 4070 3 0 3<br>DATA ANA. IN ENG. I | HYDRAULICS<br>ICI 4083 2 2 3<br>FLUIDS MECHANICS | WATER SUPPLY, WASTEWATER AND STORM WATER FACILITIES<br>ICI 7171 3 0 3<br>HYDRAULICS<br><br>INNOVATION, DEVELOPMENT AND SOCIETY ELECTIVE<br>ELG 8400 3 0 3 | SOCIAL SCIENCE ELECTIVE<br>ELG 1190 3 0 3<br><br>COMPREHENSIVE EXAM II<br>IIN 4316<br><br>CAREER SEMINAR II<br>ICI 4330 0 2 0 | |
| **Language Requirement I**<br>4 0 0 | **Language Requirement II**<br>4 0 0 | **Language Requirement III**<br>4 0 0 | **Language Requirement IV**<br>4 0 0 | **Language Requirement V**<br>4 0 0 | **Language Requirement VI**<br>4 0 0 | **Language Requirement VII**<br>4 0 0 | **Language Requirement VIII**<br>4 0 0 | | |
| TOTALS<br>HT HP CR<br>13 4 15 | TOTALS<br>HT HP CR<br>15 4 17 | TOTALS<br>HT HP CR<br>15 4 17 | TOTALS<br>HT HP CR<br>15 5 17 | TOTALS<br>HT HP CR<br>12 6 15 | TOTALS<br>HT HP CR<br>14 2 15 | TOTALS<br>HT HP CR<br>14 2 15 | TOTALS<br>HT HP CR<br>16 2 17 | TOTALS<br>HT HP CR<br>15 2 15 | TOTALS<br>HT HP CR<br>12 0 12 |

**CONVENTIONS**

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|---|---|
| | GENERAL EDUCATION |
| | BASIC PROFESSIONAL EDUCATION |
| | PROFESSIONAL EDUCATION |

| COURSE NAME | | | |
|---|---|---|---|
| CODE | HT | HP | CR |
| PRE-RE | | CO-RE | |

| | |
|---|---|
| HT | Lecture Hours |
| HP | Practical Hours |
| CR | Credits |
| PRE-RE | Prerequisites |
| CO-RE | Corequisites |

| TOTALS | | |
|---|---|---|
| HT | HP | CR |
| 141 | 31 | 155 |

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