

| CE-MATH and MATH-CE DOUBLE MAJOR PROGRAM | | | | | | | | | | NEW | |
|--|------------|------------|------------------------------|------------|------------|------------------------------|----------------|----------------|-----------------------------|------------|------------|
| CE PROGRAM | | | CE-MATH PROGRAM | | | MATH-CE Program | | | MATH Program | | |
| First Semester | Cr. | ECTS | First Semester | Cr. | ECTS | First Semester | Cr. | ECTS | First Semester | Cr. | ECTS |
| MATH 101 | 4 | 6 | MATH 101 | 4 | 6 | MATH 131 | 4 | 8 | MATH 131 | 4 | 8 |
| PHYS 101 | 4 | 8 | PHYS 101 | 4 | 8 | MATH 111 | 4 | 8 | MATH 111 | 4 | 8 |
| CMPE 150 | 3 | 5 | CE 101 | 3 | 5 | PHYS 101 ¹ | 4 | 8 | PHYS 101 ¹ | 4 | 8 |
| CE 101 | 3 | 5 | CMPE 150 | 3 | 5 | Unrest. Elect. | 3 | 5 | Unrest. Elect. | 3 | 5 |
| EC 101 | 3 | 6 | EC 101 | 3 | 6 | AE 111/HSS/MLE ² | 3 | 3 | AE 111/HSS/MLE ² | 3 | 3 |
| | 17 | 30 | | 17 | 30 | | 18 | 32 | | 18 | 32 |
| Second semester | | | Second semester | | | Second semester | | | Second semester | | |
| MATH 102 | 4 | 6 | MATH 102 | 4 | 6 | MATH 132 | 4 | 8 | MATH 132 | 4 | 8 |
| PHYS 130 | 4 | 7 | PHYS 130 | 4 | 7 | MATH 162 | 4 | 8 | MATH 162 | 4 | 8 |
| CHEM 105 | 4 | 6 | CHEM 105 | 4 | 6 | PHYS 130 ² | 4 | 8 | PHYS 130 ² | 4 | 8 |
| ENGG 110 | 3 | 5 | ENGG 110 | 3 | 5 | Unrest. Elect. | 3 | 5 | Unrest. Elect. | 3 | 5 |
| EC 102 | 3 | 6 | EC 102 | 3 | 6 | AE 112/HSS/MLE ¹ | 3 | 4 | AE 112/HSS/MLE ¹ | 3 | 4 |
| | 18 | 30 | | 18 | 30 | | 18 | 33 | | 18 | 33 |
| Third semester | | | Third semester | | | Third semester | | | Third semester | | |
| CE 211 | 4 | 6 | CE 211 | 4 | 6 | CE 211 | 4 | 6 | MATH 221 | 4 | 8 |
| CE 231 | 3 | 5 | CE 231 | 3 | 5 | CE 243 | 3 | 5 | MATH 231 | 4 | 8 |
| CE 243 | 3 | 5 | CE 243 | 3 | 5 | CmpE 150 | 3 | 5 | PHYS 201 ² | 4 | 6 |
| MATH 201 | 4 | 5 | MATH 111 | 4 | 8 | ENGG 110 ³ | 3 | 5 | CMPE 150 | 3 | 5 |
| PHYS 201 | 4 | 6 | MATH 201 | 4 | 5 | MATH 221 | 4 | 8 | TK 221 | 2 | 3 |
| TK 221 | 2 | 3 | PHYS 201 | 4 | 6 | MATH 231 | 4 | 8 | | | |
| | | | TK 221 | 2 | 3 | PHYS 201 | 4 | 6 | | | |
| | 20 | 30 | | 24 | 38 | | 25 | 43 | | 17 | 30 |
| Fourth Semester | | | Fourth Semester | | | Fourth Semester | | | Fourth Semester | | |
| CE 212 | 3 | 5 | CE 212 | 3 | 5 | CE 214 | 4 | 6 | HSS / MLE | 3 | 5 |
| CE 214 | 4 | 6 | CE 214 | 4 | 6 | CE 244 | 3 | 5 | MATH 202 | 4 | 7 |
| CE 244 | 3 | 5 | CE 244 | 3 | 5 | CE 246 | 4 | 7 | MATH 222 | 4 | 8 |
| CE 246 | 4 | 7 | CE 246 | 4 | 7 | CHEM 105 ³ | 4 | 6 | MATH 234 | 4 | 8 |
| MATH 202 | 4 | 7 | MATH 202 | 4 | 7 | MATH 222 | 4 | 8 | TK 222 | 2 | 3 |
| TK 222 | 2 | 3 | MATH 222 | 4 | 8 | MATH 234 | 4 | 8 | | | |
| | | | TK 222 | 2 | 3 | | | | | | |
| | 20 | 33 | | 24 | 41 | | 23 | 40 | | 17 | 31 |
| Fifth Semester | | | Fifth Semester | | | Fifth Semester | | | Fifth Semester | | |
| CE 303 | 3 | 5 | CE 303 | 3 | 5 | CE 231 | 3 | 5 | HSS | 3 | 5 |
| CE 315 | 4 | 6 | CE 315 | 4 | 6 | CE 315 | 4 | 6 | HTR 311 | 2 | 3 |
| CE 335 | 4 | 6 | CE 335 | 4 | 6 | EC 101 ⁵ | 3 | 6 | MATH 323 | 4 | 8 |
| CE 355 | 4 | 6 | CE 355 | 4 | 6 | MATH 202 | 4 | 7 | MATH 331 | 4 | 8 |
| HSS | 3 | 5 | MATH 231 | 4 | 8 | MATH 323 | 4 | 8 | Unrest. Elect. | 3 | 5 |
| HTR 311 | 2 | 3 | MATH 323 | 4 | 8 | MATH 331 | 4 | 8 | | | |
| | | | HTR 311 | 2 | 3 | MATH 344 ⁶ | 3 | 6 | | | |
| | 20 | 31 | | 25 | 42 | | 25 | 46 | | 16 | 29 |
| Sixth Semester | | | Sixth Semester | | | Sixth Semester | | | Sixth Semester | | |
| CE 322 | 3 | 5 | CE 322 | 3 | 5 | CE 212 | 3 | 5 | HSS | 3 | 5 |
| CE 336 | 4 | 6 | CE 336 | 4 | 6 | CE 354 | 4 | 7 | HTR 312 | 2 | 3 |
| CE 354 | 4 | 7 | CE 354 | 4 | 7 | CE 356 | 3 | 5 | MATH 338 | 4 | 8 |
| CE 356 | 3 | 5 | CE 356 | 3 | 5 | EC 102 ⁵ | 3 | 6 | MATH Elect. | 3 | 6 |
| HSS | 3 | 5 | MATH 234 | 4 | 8 | MATH Elect. | 3 | 6 | MATH Elect. | 3 | 6 |
| HTR 312 | 2 | 3 | MATH 338 | 4 | 8 | MATH Elect. ⁶ | 3 | 6 | Science Elect. | 3 | 5 |
| | | | HTR 312 | 2 | 3 | MATH 338 | 4 | 8 | | | |
| | | | | | | TK 222 | 2 | 3 | | | |
| | 19 | 31 | | 24 | 42 | | 25 | 46 | | 18 | 33 |
| Seventh Semester | | | Seventh Semester | | | Seventh Semester | | | Seventh Semester | | |
| CE 401 | 3 | 5 | CE 401 | 3 | 5 | CE 335 | 4 | 6 | MATH Elect. | 3 | 6 |
| CE 461 | 4 | 7 | CE 461 | 4 | 7 | CE 355 | 4 | 6 | MATH Elect. | 3 | 6 |
| CE Dept. Elect. ⁷ | 3 | 5 | CE Dept. Elect. ⁷ | 3 | 5 | CE 401 | 3 | 5 | Unrest. Elect. | 3 | 5 |
| CE Dept. Elect. ⁷ | 3 | 5 | CE Dept. Elect. ⁷ | 3 | 5 | CE 461 | 4 | 7 | Unrest. Elect. | 3 | 5 |
| Unrest. Elect. | 3 | 5 | HSS | 3 | 5 | CE Dept. Elect. ⁷ | 3 | 5 | Science Elect. | 3 | 5 |
| | | | MATH 331 | 4 | 8 | HTR 311 | 2 | 3 | | | |
| | | | MATH Elect. | 3 | 6 | HSS ⁸ | 3 | 5 | | | |
| | | | | | | TK 221 | 2 | 3 | | | |
| | 16 | 27 | | 23 | 41 | | 25 | 40 | | 15 | 27 |
| Eighth Semester | | | Eighth Semester | | | Eighth Semester | | | Eighth Semester | | |
| CE 402 | 3 | 5 | CE 402 | 3 | 5 | CE 322 | 3 | 5 | HSS | 3 | 5 |
| CE 492 | 4 | 8 | CE 492 Project | 4 | 8 | CE 336 | 4 | 6 | MATH Elect. | 3 | 6 |
| CE Dept. Elect. ⁷ | 3 | 5 | CE Dept. Elect. ⁷ | 3 | 5 | CE 402 | 3 | 5 | MATH Elect. | 3 | 6 |
| Rest. Elect. | 3 | 5 | HSS | 3 | 5 | CE 492 Project | 4 | 8 | MATH Elect. | 3 | 6 |
| Unrest. Elect. | 3 | 5 | MATH Elect. | 3 | 6 | HSS ⁸ | 3 | 5 | Unrest. Elect. | 3 | 5 |
| | | | MATH Elect. | 3 | 6 | CE Dept. Elect. ⁷ | 3 | 5 | | | |
| | | | MATH Elect. | 3 | 6 | HTR 312 | 2 | 3 | | | |
| | | | MATH Elect. | 3 | 6 | MATH Elect. | 3 | 6 | | | |
| | 16 | 28 | | 25 | 47 | | 25 | 43 | | 15 | 28 |
| TOTAL⁹ | 146 | 240 | | 180 | 311 | | 172/184 | 301/323 | | 134 | 243 |
| OVERLOAD | | | | 34 | 71 | | 39/50 | 58/80 | | | |

¹ For MATH students, Physics courses are one of the 3 series: (PHYS 101-130- 201) or (PHYS 101-102-201-202) or (PHYS 121-201- 202).

² MATH students whose Proficiency Exam scores are C are required to take AE 111 and AE 112. If it is B or above then they are required to take HSS or MLE.

³ MATH students who have taken this course in the first year as an unrestricted elective are exempt from this course.



⁴ MATH students who have not completed EC 101 / EC 102 yet must take EC 101 / EC 102.

⁵ MATH students can take CE 303, when MATH 344 is not provided.

⁶ One of the MATH Elect. courses must be either MATH 336 or MATH 451 or an equivalent course to be determined jointly by the MATH and CE Departments

⁷ At least one of CE Dept. Elect. must be chosen from the design courses listed by the CE Department.

⁸ HSS courses must be selected from the subset approved by the CE Department. MATH students who have not completed such 2 HSS courses yet must take an HSS course in this slot to complete the two requirements.

⁹ MATH-CE and CE-MATH students must also complete 60 days of training in accordance with the rules and regulations of the CE Department.