**[Universidad Carlos III de Madrid – SA 20264](http://www.studyabroad.purdue.edu/programs/flyer.cfm?flyer=910&SICountryCode=485&Duration=Spring%20Semester&AcademicSchoolCode=E" \t "_blank)**

The courses listed below are only some of the possibilities. Students should conduct their own research to find courses that best match their interests and degree needs (see the link above) and then discuss them with Prof Gray.

Please schedule an appoint with Prof. Gray (stop by MSEE 140 or call 49-43390 to make an appointment) to discuss course selection as it pertains to your needs.

| **Universidad Carlos III de Madrid course** | **Purdue course** |
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| 218-15971 Discrete Mathematics (6 ECTS) | ECE 39595 Discrete Mathematics (3 cr.) [Use in place of ECE 36900] |
| 256-15514 Control Engineering I | ECE 39595 Control Engineering I (3 cr.) [use in place of ECE 38200] |
| 221-14195 Mechanics of Structures (6 ECTS) | ECE 29595 Mechanics of Structures (3 cr.) [Use as Engr. Breadth] |
| 252-15400 or 217-15942 or 214-14997 Statistical Methods for Telecommunications (6 ECTS) | ECE 39595 Statistical Methods for Telecommunications (3 cr.) [Use in place of ECE 30200] |
| 218-13878 Operating Systems (6 ECTS) | ECE 49595 Operating Systems (3 cr.) [Use as EE or CmpE elective. CmpE students must then take ECE 46800 at PWL. No credit for this course if ECE 46900 taken] |
| 218-13873 Algorithms and Data Structures (6 ECTS) | ECE 39595 Algorithms and Data Structures (3 cr.) [Use in place of ECE 36800] |
| 218-15972 Principles of Software Development (6 ECTS) | ECE 39595 Principles of Software Development (3 cr.) [Use as EE/CmpE elective] |
| 252-15385 Digital Communications (6 ECTS)  (Semester 1 only) | ECE 39595 Digital Communications (4 cr.) [Use as EE Adv. Selective with lab in place of ECE 43800] |
| 252-15380 or 214-13333 Microprocessor-based Digital Systems (6 ECTS) | ECE 39595 Microprocessor-based Digital Systems (4 cr.) [Use as EE Adv. Selective with lab in place of ECE 36200; not applicable for BSCmpE, ECE 36200 must be taken at PWL] |
| 215-15944 or 217-13840 Electromagnetic Fields (6 ECTS) | ECE 39595 Electromagnetic Fields (3 cr.) [Use as EE Core in place of ECE 31100] |
| 217-13847 or 214-13332 Communications Networks and Services (6 ECTS) | ECE 49595 Communications Networks and Services (3 cr.) [use as EE/CmpE Elective] |
| 247-14068 Structure and Social Change (6 ECTS) | ECE 19595 Structure and Social Change (3 cr.) [use as GenEd Elective] |
| 201-13746 or 202-13639 Microeconomics (6 ECTS) | ECE 19595 Microeconomics (3 cr.) [use as GenEd Elective] |
| 212-14197 Introduction to Business Management (6 ECTS) | ECE 19595 Introduction to Business Management  (3 cr.) [Use as Complementary elective. Students with Fall 2013 and later catalog terms can use as GenEd Elective.] |
| 283-16526 International Politics (6 ECTS) | ECE 19595 International Politics (3 cr.) [Use as GenEd Elective] |
| 223-14033 Power Electronics (6 ECTS) | ECE 39595 Power Electronics (3 cr.) [Use as EE Elective; precludes ECE 43300] |
| 251-15335 Thermal Engineering (6 ECTS) | ECE 29595 Thermal Engineering (3 cr.) [Use as Engineering Breadth] |
| 251-15947 Languages: French (6 ECTS) | ECE 19595 French Language (3 cr.) [Use as LL Gen Ed; must take placement exam if French Language taken at PWL – no credit if places into FR 10100] |
| 256-15505 Industrial Automation (5 ECTS) | ECE 39595 Industrial Automation (3 cr.) [Use as EE Elective] |
| Cursos de Espanol Nivel B1 (4 ECTS) | LC 39900 Spanish Level B1 (2 cr.) [UL GenEd Elective] |
| 221-12087 History of San Francisco Bay and Silicon Valley (2 ECTS) | ECE 19595 History of Silicon Valley (1 cr.) [Use as GenEd Elective] |
| 251-15347 Aerial Navigation, Air Transport, and Airports | ECE 19595 Aerial Navigation, Air Transport, and Airports (3 cr.) |
| 257-15541 Materials Science & Engineering | ECE 29595 Materials Science & Engineering [use as Engr. Breadth] ( 3 cr.) |
| 204-13166 Financial Economics | ECE 39595 Financial Economics (3 cr.) [use as ULL GenEd Elective] |
| 223-14758 Production & Manufacturing Systems | ECE 29595 Production & Manufacturing Systems [use as complementary elec] ( 2 cr.) |
| 14360 Writing and Communication Skills | ECE 19595 Writing and Communication Skills [use as gen. ed.] |
| 244-15497 or 15077 Introduction to Engineering Management | ECE 19595 Introduction to Engineering Management [ use as gen. ed.] |
| 16432 Bioethics | ECE 19595 Bioethics [use as gen. ed.] |
| 15491 Programming | ECE 29595 Programming (3 PWL Cr) [use as EE elec special content - precludes ECE 26400] |
| 13215 Statistics | ECE 29595 Statistics (3 PWL Cr) [use as complem. elec) |
| 13169 Marketing Management | ECE 39595 Marketing Management (3 PWL Cr) [ use as ULL gen. ed.] |
| 218-13883 Artificial Intelligence | ECE 39595 Artificial Intelligence (3cr) [ use as CMPE elec] |
| 218-13870 Linear Algebra (6 ECTS) | ECE 29595 Linear Algebra (3cr.) [use is place of MA 26500] |
| 221-11150 Music and Technology (3 ECTS) | ECE 19595 Music and Technology (2 PWL – meets 30 hours in the term) [Intro GenEd] |
| 218-15995 Object Oriented Programming (6 ECTS) | ECE 39595 Object Oriented Programming (3 PWL) [CmpE Elective, precludes ECE 30862 |
| 218-15974 Software Engineering (6 ECTS) | ECE 39595 Software Engineering (3 PWL) [CmpE Elective; precludes ECE 46100] |
| 256-11192 The second republic (1931-1936) (3ECTS) | ECE 39595 The Second Republic 1931-1936 (1.5 cr) [Adv Level GenEd] |
| 11191 Europa and United States after the second world war (1945-1975) (3 ECTS) | ECE 39595 Europe and United States After World War II 1945-1975 (1.5 cr) [Adv Level GenEd] |
| 222-13986 Statistics for Electrical Engineering (6 ECTS) | ECE 39595 Statistics for Electrical Engineering (3 cr) [in place of ECE 30200)com |
| 212-13301 History of Journalism (6 ECTS) | ECE 39595 History of Journalism (3 cr) [Use as UL Gen. Ed.] |