

**Course Requirements and Registration Priorities  
(Undergraduate), Fall 2022**

| #            | Abbr         | Title                                                           | Cr(US) | Cr(ECTS) | PreRequisite                                          | CoRequisite | AntiRequisite | 1st priority registration                                                                   | 2nd priority registration                                   | 3rd priority registration                                   | 4th priority registration |
|--------------|--------------|-----------------------------------------------------------------|--------|----------|-------------------------------------------------------|-------------|---------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------|
| <b>GSB</b>   |              |                                                                 |        |          |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| <b>GSB</b>   |              |                                                                 |        |          |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 1            | BUS 101      | Core Course in Business                                         | 3      | 6        |                                                       |             |               | 2 year UG SOM Medical Sciences, 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH | 4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH | 2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH |                           |
| 2            | FIN 201      | Principles of Finance                                           | 3      | 6        | BUS 101 Core Course in Business (5889) (B- and above) |             |               | 4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH                                 | 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH | 2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH |                           |
| <b>Other</b> |              |                                                                 |        |          |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| <b>Other</b> |              |                                                                 |        |          |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 3            | T - 17191    | Artists, Patrons and Academies in Early Modern Europe           | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 4            | T - 17289    | Literature and Culture of English Speaking Countries: Modernism | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 5            | T - 17310    | English Literature and The Media                                | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 6            | T - 17352    | Intercultural Communication                                     | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 7            | T - 17609    | Urban Music and Oral Tradition                                  | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 8            | T - 18270    | International Corporate Finance                                 | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 9            | T - 18340    | Theory of Knowledge I                                           | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 10           | T - 18981    | Political Actors and Collective Action                          | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 11           | T - 19150    | History of the twentieth century                                | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 12           | T - 19545    | Experimental Economics                                          | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 13           | T - BC 11961 | Japan and the World                                             | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 14           | T - BC 51161 | Media Politics                                                  | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |
| 15           | T - BE 21381 | Introduction to Political Science                               | 3      | 6        |                                                       |             |               |                                                                                             |                                                             |                                                             |                           |

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| 16                      | T - BE<br>21831 | Quantitative Methods for<br>Social Sciences                                              | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 17                      | T - BE<br>22292 | International Financial<br>Institutions and<br>Economic Development<br>in Southeast Asia | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 18                      | T - BE<br>22351 | Introduction to<br>International Law                                                     | 1.5 | 3 |                                                    |  |  |                                                                      |                        |  |
| 19                      | T - BE<br>22581 | Sociology of Migration                                                                   | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 20                      | T - EC<br>4460  | Gender and Economic<br>Policy in International<br>Comparison                             | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 21                      | T - EC<br>4600  | The Economics of Sports                                                                  | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 22                      | T - FH<br>27041 | Economic Dynamics                                                                        | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 23                      | T - FH<br>27041 | Economic Dynamics                                                                        | 2   | 4 |                                                    |  |  |                                                                      |                        |  |
| 24                      | T - FR<br>1020  | Beginning French II                                                                      | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| 25                      | T - PLS<br>2120 | American National<br>Government                                                          | 3   | 6 |                                                    |  |  |                                                                      |                        |  |
| <b>SoM</b>              |                 |                                                                                          |     |   |                                                    |  |  |                                                                      |                        |  |
| <b>Medical Sciences</b> |                 |                                                                                          |     |   |                                                    |  |  |                                                                      |                        |  |
| 26                      | NUSM<br>101     | Introduction to Medicine                                                                 | 2   | 4 |                                                    |  |  | 1 year UG SOM Medical<br>Sciences, 2 year UG SOM<br>Medical Sciences | Biological<br>Sciences |  |
| 27                      | NUSM<br>301     | Introduction to<br>Immunology,<br>Microbiology and<br>Genetics                           | 3   | 6 | BIOL 120 Modern Biology<br>II (1195) (C and above) |  |  | 3 year UG SOM Medical<br>Sciences                                    |                        |  |
| 28                      | NUSM<br>302     | Introduction to Statistics<br>for Evidence-Based<br>Practice                             | 3   | 6 | MATH 161 Calculus I<br>(118) (C- and above)        |  |  | 3 year UG SOM Medical<br>Sciences                                    |                        |  |
| 29                      | NUSM<br>303     | Introduction to Anatomy<br>and Histology                                                 | 3   | 6 | BIOL 120 Modern Biology<br>II (1195) (C and above) |  |  | 3 year UG SOM Medical<br>Sciences                                    |                        |  |
| <b>Nursing</b>          |                 |                                                                                          |     |   |                                                    |  |  |                                                                      |                        |  |
| 30                      | NUR 103L        | Microbiology for Nurses<br>with Lab                                                      | 4   | 8 |                                                    |  |  | 1 year UG SOM Nursing                                                |                        |  |
| 31                      | NUR 112         | Introduction to<br>Professional Nursing                                                  | 2   | 4 |                                                    |  |  | 1 year UG SOM Nursing                                                |                        |  |
| 32                      | NUR 201         | Pathophysiologic<br>Foundations of Nursing<br>Care                                       | 3   | 6 |                                                    |  |  | 2 year UG SOM Nursing                                                |                        |  |

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| 33 | NUR 202   | Introduction to Genetics and Molecular Therapeutics          | 3 | 6  |  |  |  | 2 year UG SOM Nursing,<br>3 year UG SOM Nursing                              |  |  |  |
| 34 | NUR 203   | Pharmacology and Therapeutics                                | 3 | 6  |  |  |  | 2 year UG SOM Nursing                                                        |  |  |  |
| 35 | NUR 205   | Psychology for the Health Practitioner                       | 3 | 6  |  |  |  | 3 year UG SOM Nursing                                                        |  |  |  |
| 36 | NUR 211   | Foundations of Nursing Practice I                            | 3 | 6  |  |  |  | 2 year UG SOM Nursing                                                        |  |  |  |
| 37 | NUR 301   | Nutrition for Clinical Practice                              | 3 | 6  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 38 | NUR 302   | Physical Assessment Across the Lifespan                      | 4 | 8  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 39 | NUR 303   | Nursing Care of Older Adults                                 | 4 | 8  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 40 | NUR 304   | Introduction to Basic Statistics for Evidence Based Practice | 3 | 6  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 41 | NUR 311C  | Obstetric Nursing + Clinical                                 | 5 | 10 |  |  |  | 3 year UG SOM Nursing                                                        |  |  |  |
| 42 | NUR 312C  | Pediatric Nursing + Clinical: Care of Children and Families  | 4 | 8  |  |  |  | 3 year UG SOM Nursing                                                        |  |  |  |
| 43 | NUR 321   | Ethics in Healthcare                                         | 2 | 4  |  |  |  | 3 year UG SOM Medical Sciences, 3 year UG SOM Nursing                        |  |  |  |
| 44 | NUR 401   | Education: Principles and Practice for Teaching in Nursing   | 4 | 8  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 45 | NUR 403   | Data Analytics for Quality Improvement in Healthcare         | 3 | 6  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 46 | NUR 404   | Community and Home Health Nursing                            | 4 | 8  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |
| 47 | NUR 406.1 | Medical-Surgical Nursing: Complex Surgical Management        | 4 | 8  |  |  |  | For Bachelor of Nursing (2-year program) only! Registration by School admin. |  |  |  |

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| 48                                                 | NUR 411C         | Community and Home Health Nursing and Clinical                                                 | 4 | 8  |                                                                                                                                                                  |  |  | 4 year UG SOM Nursing                                                                     |      |  |  |
| 49                                                 | NUR 412          | Geriatric Nursing: Nursing Care of the Older Adult                                             | 2 | 4  |                                                                                                                                                                  |  |  | 4 year UG SOM Nursing                                                                     |      |  |  |
| 50                                                 | NUR 413C         | Medical Surgical Nursing 3 - Management of the Complex and Critically Ill Patient and Clinical | 7 | 14 |                                                                                                                                                                  |  |  | 4 year UG SOM Nursing                                                                     |      |  |  |
| 51                                                 | NUR 421          | Capstone I: Developing a Project Proposal in Nursing                                           | 3 | 6  |                                                                                                                                                                  |  |  | 4 year UG SOM Nursing                                                                     |      |  |  |
| <b>SMG</b>                                         |                  |                                                                                                |   |    |                                                                                                                                                                  |  |  |                                                                                           |      |  |  |
| <b>Economics, School of Mining and Geosciences</b> |                  |                                                                                                |   |    |                                                                                                                                                                  |  |  |                                                                                           |      |  |  |
| 52                                                 | SMG 200/ECON 220 | Resource Economics                                                                             | 3 | 6  | MATH 161 Calculus I (118) (C- and above) OR MATH 162 Calculus II (170) (C- and above)                                                                            |  |  | 4 year UG SMG                                                                             |      |  |  |
| <b>Mining Engineering</b>                          |                  |                                                                                                |   |    |                                                                                                                                                                  |  |  |                                                                                           |      |  |  |
| 53                                                 | MINE 301         | Mine Surveying and Geographic Information Systems                                              | 3 | 6  |                                                                                                                                                                  |  |  | Mining Engineering                                                                        |      |  |  |
| 54                                                 | MINE 302         | Geomechanics                                                                                   | 3 | 6  |                                                                                                                                                                  |  |  | Mining Engineering                                                                        |      |  |  |
| 55                                                 | MINE 304         | Resource Estimation                                                                            | 3 | 6  |                                                                                                                                                                  |  |  | Mining Engineering                                                                        |      |  |  |
| 56                                                 | MINE 401         | Mining Geotechnical Engineering                                                                | 3 | 6  | MINE 302 Geomechanics (5878) (C- and above)                                                                                                                      |  |  | Mining Engineering                                                                        |      |  |  |
| 57                                                 | MINE 402         | Coal Mining                                                                                    | 3 | 6  |                                                                                                                                                                  |  |  | Mining Engineering                                                                        |      |  |  |
| 58                                                 | MINE 405         | Mine Ventilation                                                                               | 3 | 6  |                                                                                                                                                                  |  |  | Mining Engineering                                                                        |      |  |  |
| 59                                                 | MINE 489         | Research Project I                                                                             | 3 | 6  |                                                                                                                                                                  |  |  | Mining Engineering                                                                        |      |  |  |
| <b>Petroleum Engineering</b>                       |                  |                                                                                                |   |    |                                                                                                                                                                  |  |  |                                                                                           |      |  |  |
| 60                                                 | PETE 201         | Fluid Mechanics and Thermodynamics                                                             | 3 | 6  | MATH 161 Calculus I (118) (D and above) OR CHEM 101 General Chemistry I (113) (D and above)                                                                      |  |  | 2 year UG SMG Mining Engineering, 3 year UG SMG Mining Engineering, Petroleum Engineering | SEDS |  |  |
| 61                                                 | PETE 301         | Numerical Methods for Petroleum Engineers                                                      | 3 | 6  | ENG 200 Engineering Mathematics III (Differential Equations and Linear Algebra) (5009) (C- and above) OR ENG 101 Programming for Engineers (4517) (C- and above) |  |  | Petroleum Engineering                                                                     |      |  |  |
| 62                                                 | PETE 302         | Reservoir Engineering I with Laboratory works                                                  | 4 | 8  | PETE 204 Reservoir Rock and Fluid Properties with Lab (5487) (C- and above)                                                                                      |  |  | Petroleum Engineering                                                                     |      |  |  |

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| 63                                      | PETE 303 | Well Logging and Formation Evaluation | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (C- and above)                                                                                                     |  |  | Petroleum Engineering |                    |      |  |
| 64                                      | PETE 304 | Well Completion and Stimulation       | 3 | 6 | PETE 203 Drilling Engineering with Laboratories (5486) (C- and above)                                                                                      |  |  | Petroleum Engineering |                    |      |  |
| 65                                      | PETE 400 | Capstone Design Project I             | 3 | 6 | PETE 302 Reservoir Engineering I with Laboratory works (5955) (C- and above) AND PETE 203 Drilling Engineering with Laboratories (5486) (C- and above)     |  |  | Petroleum Engineering |                    |      |  |
| 66                                      | PETE 401 | Production Enhancement                | 3 | 6 | PETE 307 Production Engineering (6146) (C- and above)                                                                                                      |  |  | Petroleum Engineering |                    |      |  |
| <b>School of Mining and Geosciences</b> |          |                                       |   |   |                                                                                                                                                            |  |  |                       |                    |      |  |
| 67                                      | GEOL 201 | Mineralogy                            | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (C- and above)                                                                                                     |  |  | Geology               | Mining Engineering | SEDS |  |
| 68                                      | GEOL 202 | Geologic Maps and Cross-Sections      | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 102 Fundamentals of Geology (4772) (D and above)                                             |  |  | Geology               | Mining Engineering | SEDS |  |
| 69                                      | GEOL 203 | Geomorphology                         | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (C- and above) OR GEOL 102 Fundamentals of Geology (4772) (C- and above)                                           |  |  | Geology               | Mining Engineering | SEDS |  |
| 70                                      | GEOL 302 | Thermodynamics and Geochemistry       | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 102 Fundamentals of Geology (4772) (D and above)                                             |  |  | Geology               | Mining Engineering | SEDS |  |
| 71                                      | GEOL 305 | Geology of ore deposits               | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 102 Fundamentals of Geology (4772) (D and above) OR GEOL 201 Mineralogy (5122) (D and above) |  |  | Geology               | Mining Engineering | SEDS |  |
| 72                                      | GEOL 306 | Geodynamics                           | 3 | 6 | GEOL 101 Fundamentals of Geology (4774) (D and above) OR GEOL 102 Fundamentals of Geology (4772) (D and above)                                             |  |  | SMG                   |                    |      |  |
| 73                                      | GEOL 308 | Environmental Geochemistry            | 3 | 6 |                                                                                                                                                            |  |  | Geology               | Mining Engineering | SEDS |  |

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| 74                        | GEOL 310  | Field Geology 2                              | 3 | 6 | GEOL 303 Structural Geology and Tectonics (5874) (D and above) OR GEOL 301 Igneous and metamorphic petrology (5886) (D and above) |  |                                                 | 4 year UG SMG Geology                                                                                                                                                                         | 4 year UG SMG Mining Engineering                                                                                                        |                       |  |
| 75                        | GEOL 401  | Petroleum Geology and Geochemistry           | 3 | 6 |                                                                                                                                   |  |                                                 | 4 year UG SMG Geology, 4 year UG SMG Petroleum Engineering                                                                                                                                    |                                                                                                                                         | 3 year UG SMG Geology |  |
| 76                        | GEOL 402  | Water Resource Management                    | 3 | 6 |                                                                                                                                   |  |                                                 | 4 year UG SMG Geology, 4 year UG SMG Mining Engineering                                                                                                                                       |                                                                                                                                         | 3 year UG SMG Geology |  |
| 77                        | GEOL 404  | Research Project I                           | 3 | 6 |                                                                                                                                   |  |                                                 | 4 year UG SMG Geology                                                                                                                                                                         |                                                                                                                                         |                       |  |
| 78                        | SMG 100   | Introduction to Natural Resources Extraction | 3 | 6 |                                                                                                                                   |  |                                                 | SMG                                                                                                                                                                                           | SEDS                                                                                                                                    |                       |  |
| <b>SSH</b>                |           |                                              |   |   |                                                                                                                                   |  |                                                 |                                                                                                                                                                                               |                                                                                                                                         |                       |  |
| <b>Biological Science</b> |           |                                              |   |   |                                                                                                                                   |  |                                                 |                                                                                                                                                                                               |                                                                                                                                         |                       |  |
| 79                        | BIOL 101  | Biology for non-Science majors               | 3 | 6 |                                                                                                                                   |  | BIOL 110 Modern Biology I (1070) (C- and above) | 5 year UG SEDS, 5 year UG SSH, Anthropology, Economics, History, Nursing, Political Science and International Relations, Sociology, Undeclared SSH, World Languages, Literatures and Cultures |                                                                                                                                         |                       |  |
| 80                        | BIOL 105  | General Biology                              | 3 | 6 |                                                                                                                                   |  |                                                 | 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                                                                                                            | Chemistry, Mathematics, Physics                                                                                                         | SEDS, SMG, SSH, SoM   |  |
| 81                        | BIOL 110  | Modern Biology I                             | 3 | 6 |                                                                                                                                   |  |                                                 | 1 year UG SOM Medical Sciences, 2 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH                                                                                              | Chemistry, Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Robotics Engineering, Robotics and Mechatronics | SEDS, SMG, SSH, SoM   |  |
| 82                        | BIOL 110L | Modern Biology I Laboratory                  | 1 | 2 |                                                                                                                                   |  | BIOL 110 Modern Biology I (1070) (C and above)  | 1 year UG SOM Medical Sciences, 2 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH                                                                                              | Chemistry, Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Robotics Engineering, Robotics and Mechatronics | SEDS, SMG, SSH, SoM   |  |

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| 83 | BIOL 120  | Modern Biology II                       | 3 | 6 | BIOL 110 Modern Biology I (1070) (C and above)                                                                                                                                                                                                                |                                                            |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences, Undeclared SSH                                  | Chemistry, Mathematics, Physics                                    | SEDS, SMG, SSH, SoM |  |
| 84 | BIOL 120L | Modern Biology II Laboratory            | 1 | 2 | BIOL 110 Modern Biology I (1070) (C and above) OR BIOL 110L Modern Biology I Laboratory (5448) (C and above)                                                                                                                                                  | BIOL 120 Modern Biology II (1195) (C and above)            |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences, Undeclared SSH                                  | Chemistry, Mathematics, Physics                                    | SEDS, SMG, SSH, SoM |  |
| 85 | BIOL 301  | Molecular Cell Biology                  | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above)                                                                                                                                                                                                               |                                                            |  | 2 year UG SOM Medical Sciences, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH | Biological Sciences                                                | SEDS, SMG, SSH, SoM |  |
| 86 | BIOL 301L | Molecular Cell Biology Laboratory       | 1 | 2 | BIOL 120 Modern Biology II (1195) (C and above) OR BIOL 120L Modern Biology II Laboratory (5443) (C and above)                                                                                                                                                | BIOL 301 Molecular Cell Biology (5809) (C and above)       |  | 2 year UG SOM Medical Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH                                    | Biological Sciences                                                | SEDS, SMG, SSH, SoM |  |
| 87 | BIOL 305  | Introduction to Microbiology            | 3 | 6 | (BIOL 120 Modern Biology II (1195) (C and above) AND BIOL 120L Modern Biology II Laboratory (5443) (C and above)) OR BIOL 120 Modern Biology II (1195) (C and above)                                                                                          |                                                            |  | 2 year UG SOM Medical Sciences, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH | Chemistry, Mathematics, Physics                                    | SEDS, SMG, SSH, SoM |  |
| 88 | BIOL 305L | Introduction to Microbiology Laboratory | 1 | 2 | BIOL 120 Modern Biology II (1195) (C and above) OR BIOL 120L Modern Biology II Laboratory (5443) (C and above)                                                                                                                                                | BIOL 305 Introduction to Microbiology (5789) (C and above) |  | 2 year UG SOM Medical Sciences, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH | Chemistry, Mathematics, Physics                                    | SEDS, SMG, SSH, SoM |  |
| 89 | BIOL 310  | Immunology                              | 3 | 6 | BIOL 301 Molecular Biology of Cell with Lab (1197) (C and above) OR BIOL 305 Introduction to Microbiology with Lab (1642) (C and above) OR BIOL 301 Molecular Cell Biology (5809) (C and above) OR BIOL 305 Introduction to Microbiology (5789) (C and above) |                                                            |  | 2 year UG SOM Medical Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH                                    | 3 year UG SSH Biological Sciences, Chemistry, Mathematics, Physics | SEDS, SMG, SSH, SoM |  |

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| 90 | BIOL 320 | Developmental Biology                     | 3 | 6 | BIOL 230 Human Anatomy and Physiology I (72) (C and above) OR BIOL 230 Human Anatomy and Physiology I (6217) (C and above) |  |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                  | Chemistry, Mathematics, Physics                      | SEDS, SMG, SSH, SoM |  |
| 91 | BIOL 321 | Bioethics                                 | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above)                                                                            |  |  | 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 4 year UG SSH Chemistry, 5 year UG SEDS, 5 year UG SSH        | Biological Sciences                                  | SEDS, SMG, SSH, SoM |  |
| 92 | BIOL 331 | Human Anatomy and Physiology II           | 3 | 6 | BIOL 230 Human Anatomy and Physiology I (72) (C and above) OR BIOL 230 Human Anatomy and Physiology I (6217) (C and above) |  |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                  | Chemistry, Mathematics, Physics                      | SEDS, SMG, SSH, SoM |  |
| 93 | BIOL 341 | Biochemistry I                            | 3 | 6 | CHEM 211 Organic Chemistry I (154) (C and above)                                                                           |  |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                  | Chemistry, Mathematics, Physics                      | SEDS, SMG, SSH, SoM |  |
| 94 | BIOL 355 | Critical Research Reasoning               | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above)                                                                            |  |  | 3 year UG SOM Medical Sciences, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH | Biological Sciences                                  | SEDS, SMG, SSH, SoM |  |
| 95 | BIOL 370 | Genetics                                  | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above)                                                                            |  |  | 2 year UG SOM Medical Sciences, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH | Biological Sciences                                  | SEDS, SMG, SSH, SoM |  |
| 96 | BIOL 380 | Biology of Behavior                       | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above)                                                                            |  |  | 2 year UG SOM Medical Sciences, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH | Biological Sciences, Chemistry, Mathematics, Physics | SEDS, SMG, SSH, SoM |  |
| 97 | BIOL 385 | Cell signaling: principles and mechanisms | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above)                                                                            |  |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                  | Chemistry, Mathematics, Physics                      | SEDS, SMG, SSH, SoM |  |
| 98 | BIOL 392 | Directed Study in Biology                 | 3 | 6 |                                                                                                                            |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                        |                                                      |                     |  |



|                  |          |                                  |   |   |                                                                                                                                                                                                                                                           |                                                           |  |                                                                                                                                                                                                                                |                                                                                                                                    |                     |  |
|------------------|----------|----------------------------------|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------|--|
| 99               | BIOL 452 | Biology of Cancer                | 3 | 6 | BIOL 231 Human Anatomy and Physiology II (479) (C and above) OR BIOL 301 Molecular Biology of Cell with Lab (1197) (C and above) OR BIOL 331 Human Anatomy and Physiology II (6218) (C and above) OR BIOL 301 Molecular Cell Biology (5809) (C and above) |                                                           |  | 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH                                                                                                                            | Biological Sciences                                                                                                                | SEDS, SMG, SSH, SoM |  |
| 100              | BIOL 456 | Biology Research Design          | 3 | 6 |                                                                                                                                                                                                                                                           | BIOL 355 Critical Research Reasoning (1000) (C and above) |  | 4 year UG SSH Biological Sciences, 5 year UG SEDS, 5 year UG SSH                                                                                                                                                               | Biological Sciences, Chemical Engineering, Computer Science, Mathematics, Physics, Robotics Engineering, Robotics and Mechatronics | SEDS, SMG, SSH, SoM |  |
| 101              | BIOL 460 | Human Parasitology               | 3 | 6 | BIOL 305 Introduction to Microbiology with Lab (1642) (C and above) OR BIOL 305 Introduction to Microbiology (5789) (C and above)                                                                                                                         |                                                           |  | 2 year UG SOM Medical Sciences, 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                                                                                                             | Chemistry, Mathematics, Physics                                                                                                    | SEDS, SMG, SSH, SoM |  |
| 102              | BIOL 470 | Advanced Cell Biology            | 3 | 6 | BIOL 120 Modern Biology II (1195) (C and above) AND BIOL 110L Modern Biology I Laboratory (5448) (C and above) AND (BIOL 341 Biochemistry I (2002) (C and above) OR CHEM 341 Biochemistry I (1058) (C and above))                                         |                                                           |  | 5 year UG SEDS, 5 year UG SSH, Biological Sciences                                                                                                                                                                             | Chemistry, Mathematics, Physics                                                                                                    | SEDS, SMG, SSH, SoM |  |
| 103              | BIOL 490 | Honors Thesis Research           | 0 | 0 | BIOL 355 Critical Research Reasoning (1000) (B and above)                                                                                                                                                                                                 |                                                           |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                                                                   |                                                                                                                                    |                     |  |
| <b>Chemistry</b> |          |                                  |   |   |                                                                                                                                                                                                                                                           |                                                           |  |                                                                                                                                                                                                                                |                                                                                                                                    |                     |  |
| 104              | CHEM 090 | Chemistry for Non-Science majors | 3 | 6 |                                                                                                                                                                                                                                                           |                                                           |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Economics, History, Nursing, Political Science and International Relations, Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH, World Languages, Literatures and Cultures | Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Robotics Engineering, Robotics and Mechatronics, SMG  | SEDS, SSH           |  |

|     |           |                                    |   |   |                                                                                                                                                     |                                                             |  |                                                                                                                                                                                                                                |                                                                                                                                   |                     |  |
|-----|-----------|------------------------------------|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------|--|
| 105 | CHEM 091  | Survey of Physical Science         | 3 | 6 |                                                                                                                                                     |                                                             |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Economics, History, Nursing, Political Science and International Relations, Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH, World Languages, Literatures and Cultures | Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Robotics Engineering, Robotics and Mechatronics, SMG | SEDS, SSH           |  |
| 106 | CHEM 101  | General Chemistry I                | 3 | 6 |                                                                                                                                                     |                                                             |  | 1 year UG SMG, 5 year UG SEDS, 5 year UG SSH, Biological Sciences, Chemistry, SoM                                                                                                                                              |                                                                                                                                   |                     |  |
| 107 | CHEM 101L | General Chemistry I lab            | 1 | 2 |                                                                                                                                                     | CHEM 101 General Chemistry I (113) (C and above)            |  | 1 year UG SMG, 5 year UG SEDS, 5 year UG SSH, Biological Sciences, Chemistry, SoM                                                                                                                                              |                                                                                                                                   |                     |  |
| 108 | CHEM 211  | Organic Chemistry I                | 3 | 6 | CHEM 102 General Chemistry II (232) (C and above)                                                                                                   |                                                             |  | 5 year UG SEDS, 5 year UG SSH, Biological Sciences, Chemistry                                                                                                                                                                  | SEDS, SMG, SSH, SoM                                                                                                               |                     |  |
| 109 | CHEM 211L | Organic Chemistry I Lab            | 1 | 2 | CHEM 101L General Chemistry I lab (179) (C and above)                                                                                               | CHEM 211 Organic Chemistry I (154) (C and above)            |  | 2 year UG SSH, 3 year UG SSH, 4 year UG SSH, Chemistry                                                                                                                                                                         |                                                                                                                                   |                     |  |
| 110 | CHEM 220  | Quantitative Chemical Analysis     | 3 | 6 | CHEM 102 General Chemistry II (232) (C and above)                                                                                                   |                                                             |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                                                       | Biological Sciences                                                                                                               | SEDS, SMG, SSH, SoM |  |
| 111 | CHEM 220L | Quantitative Chemical Analysis Lab | 1 | 2 | CHEM 101L General Chemistry I lab (179) (C and above)                                                                                               | CHEM 220 Quantitative Chemical Analysis (555) (C and above) |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                                                       | Biological Sciences                                                                                                               | SEDS, SMG, SSH, SoM |  |
| 112 | CHEM 331  | Physical Chemistry I               | 3 | 6 | CHEM 220 Quantitative Chemical Analysis (555) (C and above) AND PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C and above) |                                                             |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                                                       | Biological Sciences                                                                                                               | SEDS, SMG, SSH, SoM |  |
| 113 | CHEM 331L | Physical Chemistry Lab             | 1 | 2 |                                                                                                                                                     | CHEM 331 Physical Chemistry I (634) (C and above)           |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                                                       | Biological Sciences                                                                                                               | SEDS, SMG, SSH, SoM |  |
| 114 | CHEM 341  | Biochemistry I                     | 3 | 6 | CHEM 211 Organic Chemistry I (154) (C and above)                                                                                                    |                                                             |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                                                       | Biological Sciences                                                                                                               | SEDS, SMG, SSH, SoM |  |

|                                      |           |                                         |   |   |                                                                                                                                                                               |                                                            |  |                                                                                                                                                                                                       |                                                                             |                     |  |
|--------------------------------------|-----------|-----------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------|--|
| 115                                  | CHEM 341L | Biochemistry I Lab                      | 1 | 2 | CHEM 212L Organic Chemistry II Lab (444) (C and above)                                                                                                                        | CHEM 341 Biochemistry I (1058) (C and above)               |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                              | Biological Sciences                                                         | SEDS, SMG, SSH, SoM |  |
| 116                                  | CHEM 350  | Advanced Inorganic Chemistry            | 3 | 6 | CHEM 212 Organic Chemistry II (443) (C and above) AND CHEM 212L Organic Chemistry II Lab (444) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above) |                                                            |  | 4 year UG SSH, Chemistry                                                                                                                                                                              |                                                                             |                     |  |
| 117                                  | CHEM 350L | Advanced Inorganic Chemistry Laboratory | 1 | 2 | CHEM 212 Organic Chemistry II (443) (C and above) AND CHEM 212L Organic Chemistry II Lab (444) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above) | CHEM 350 Advanced Inorganic Chemistry (1905) (C and above) |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                              | Biological Sciences                                                         | SEDS, SMG, SSH, SoM |  |
| 118                                  | CHEM 400  | Chemistry Seminar                       | 3 | 6 | CHEM 380 Research Methods (636) (C and above)                                                                                                                                 |                                                            |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                              | Biological Sciences                                                         | SEDS, SMG, SSH, SoM |  |
| 119                                  | CHEM 410  | Structural Spectroscopy                 | 4 | 8 | CHEM 212 Organic Chemistry II (443) (C and above)                                                                                                                             |                                                            |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                              | Biological Sciences                                                         | SEDS, SMG, SSH, SoM |  |
| 120                                  | CHEM 471  | Environmental Chemistry                 | 3 | 6 | CHEM 102 General Chemistry II (232) (C and above)                                                                                                                             |                                                            |  | 5 year UG SEDS, 5 year UG SSH, Chemistry                                                                                                                                                              | Biological Sciences                                                         | SEDS, SMG, SSH, SoM |  |
| <b>Communication and Composition</b> |           |                                         |   |   |                                                                                                                                                                               |                                                            |  |                                                                                                                                                                                                       |                                                                             |                     |  |
| 121                                  | WCS 101   | Communication and Society               | 3 | 6 |                                                                                                                                                                               |                                                            |  | SEDS, SMG, SSH, SoM                                                                                                                                                                                   |                                                                             |                     |  |
| 122                                  | WCS 150   | Rhetoric and Composition                | 3 | 6 |                                                                                                                                                                               |                                                            |  | 1 year UG SEDS, 1 year UG SMG, 1 year UG SOM, 1 year UG SSH, 2 year UG SOM Nursing, 3 year UG SOM Nursing, 4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH | SEDS, SMG, SSH, SoM                                                         |                     |  |
| 123                                  | WCS 200   | Introduction to Public Speaking         | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C-and above)                                                                                                                         |                                                            |  | 2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH, 3 year UG SOM Nursing, 5 year UG SEDS, 5 year UG SSH                                                                                     | 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH, 4 year UG SEDS | SEDS, SMG, SSH, SoM |  |
| 124                                  | WCS 210   | Technical and Professional Writing      | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C-and above)                                                                                                                         |                                                            |  | 5 year UG SEDS, 5 year UG SSH, SEDS, SMG                                                                                                                                                              |                                                                             | SSH, SoM            |  |

|     |         |                                                                          |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                   |                                                                             |                     |  |
|-----|---------|--------------------------------------------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------|--|
| 125 | WCS 220 | Science Writing                                                          | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C- and above)                                                                                                                                                                                                                                                                                                                                                            |  |  | SEDS, SMG, SSH, SoM                                                                                               |                                                                             |                     |  |
| 126 | WCS 230 | Say What you Mean: Clarity, Precision, and Style in Academic Writing     | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C- and above)                                                                                                                                                                                                                                                                                                                                                            |  |  | 2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH, 3 year UG SOM Nursing, 5 year UG SEDS, 5 year UG SSH | 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH, 4 year UG SEDS | SEDS, SMG, SSH, SoM |  |
| 127 | WCS 240 | Writing for Digital Media                                                | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C- and above)                                                                                                                                                                                                                                                                                                                                                            |  |  | 2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH, 3 year UG SOM Nursing, 5 year UG SEDS, 5 year UG SSH | 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH, 4 year UG SEDS | SEDS, SMG, SSH, SoM |  |
| 128 | WCS 250 | Advanced Rhetoric and Composition                                        | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C- and above)                                                                                                                                                                                                                                                                                                                                                            |  |  | 3 year UG SOM Nursing, 5 year UG SSH, SEDS, SMG, SSH, SoM                                                         | 2 year UG SOM, 2 year UG SSH                                                |                     |  |
| 129 | WCS 361 | Advanced Fiction Writing                                                 | 3 | 6 | WCS 260/WLL 235 Creative Writing: Introduction to Fiction Writing I (4000) (C- and above)                                                                                                                                                                                                                                                                                                                         |  |  | SSH                                                                                                               |                                                                             | SEDS, SMG, SoM      |  |
| 130 | WCS 390 | Writing Fellows I - Composition and Collaboration in Theory and Practice | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (B and above) AND (WCS 210 Technical and Professional Writing (4881) (B+ and above) OR WCS 220 Science Writing (5686) (B+ and above) OR WCS 230 Say What you Mean: Clarity, Precision, and Style in Academic Writing (3026) (B+ and above) OR WCS 240 Writing for Digital Media (4421) (B+ and above) OR WCS 250 Advanced Rhetoric and Composition (3027) (B+ and above)) |  |  | 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH, 5 year UG SEDS, 5 year UG SSH                        | 4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH                 |                     |  |
| 131 | WCS 391 | Writing Fellows II - Practicum in Composition & Collaboration            | 3 | 6 | WCS 390 Writing Fellows I - Composition and Collaboration in Theory and Practice (1969) (B and above)                                                                                                                                                                                                                                                                                                             |  |  | Instructor's Permission Required. Registration through Add Course form only!                                      |                                                                             |                     |  |
| 132 | WCS 392 | Writing Fellows III - Research & Practice in Writing & Peer Mentorship   | 3 | 6 | WCS 391 Writing Fellows II - Practicum in Composition & Collaboration (3425) (B and above)                                                                                                                                                                                                                                                                                                                        |  |  | Instructor's Permission Required. Registration through Add Course form only!                                      |                                                                             |                     |  |

**Communication and Composition, Languages, Literature and Linguistics**

|                  |                 |                                                     |   |   |                                                                                                                                                                                                                            |  |  |                                                                              |                                           |                     |  |
|------------------|-----------------|-----------------------------------------------------|---|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------|-------------------------------------------|---------------------|--|
| 133              | WCS 260/WLL 235 | Creative Writing: Introduction to Fiction Writing I | 3 | 6 | WCS 150 Rhetoric and Composition (2183) (C- and above)                                                                                                                                                                     |  |  | 2 year UG SOM, 2 year UG SSH, 3 year UG SOM Nursing, 5 year UG SSH           | World Languages, Literatures and Cultures | SEDS, SMG, SSH, SoM |  |
| 134              | WLL 462/WCS 462 | Creative Nonfiction                                 | 3 | 6 | WCS 260/WLL 235 Creative Writing: Introduction to Fiction Writing I (4000) (C and above)                                                                                                                                   |  |  | Instructor's Permission Required. Registration through Add Course form only! |                                           |                     |  |
| <b>Economics</b> |                 |                                                     |   |   |                                                                                                                                                                                                                            |  |  |                                                                              |                                           |                     |  |
| 135              | ECON 101        | Introduction to Microeconomics                      | 3 | 6 |                                                                                                                                                                                                                            |  |  | 5 year UG SEDS, 5 year UG SSH, Undeclared SSH                                | SSH                                       | SEDS, SMG, SoM      |  |
| 136              | ECON 102        | Introduction to Macroeconomics                      | 3 | 6 |                                                                                                                                                                                                                            |  |  | 5 year UG SEDS, 5 year UG SSH, Undeclared SSH                                | SSH                                       | SEDS, SMG, SoM      |  |
| 137              | ECON 120        | Managerial Economics                                | 3 | 6 |                                                                                                                                                                                                                            |  |  | SEDS                                                                         | SMG, SSH, SoM                             |                     |  |
| 138              | ECON 201        | Intermediate Microeconomics                         | 3 | 6 | ECON 101 Introduction to Microeconomics (379) (B- and above) AND (MATH 161 Calculus I (118) (B- and above) OR MATH 162 Calculus II (170) (B- and above))                                                                   |  |  | Economics                                                                    | 2 year UG SSH Undeclared                  | SSH                 |  |
| 139              | ECON 202        | Intermediate Macroeconomics                         | 3 | 6 | ECON 102 Introduction to Macroeconomics (503) (B- and above) AND (MATH 161 Calculus I (118) (B- and above) OR MATH 162 Calculus II (170) (B- and above))                                                                   |  |  | Economics                                                                    | 2 year UG SSH Undeclared                  | SSH                 |  |
| 140              | ECON 211        | Economic Statistics                                 | 3 | 6 | ECON 101 Introduction to Microeconomics (379) (C and above) OR ECON 102 Introduction to Macroeconomics (503) (C and above)                                                                                                 |  |  | Economics                                                                    | 2 year UG SSH Undeclared                  | SSH                 |  |
| 141              | ECON 300        | Research Assistance in Economics                    | 1 | 2 | ECON 101 Introduction to Microeconomics (379) (C- and above) AND ECON 102 Introduction to Macroeconomics (503) (C- and above)                                                                                              |  |  | Instructor's Permission Required. Registration through Add Course form only! |                                           |                     |  |
| 142              | ECON 301        | Econometrics I                                      | 3 | 6 | ECON 211 Economic Statistics (2280) (C- and above) OR (MATH 321 Probability (482) (C- and above) AND (MATH 322 Mathematical Statistics (1165) (C- and above) OR MATH 310 Applied Statistical Methods (82) (C- and above))) |  |  | Economics                                                                    | 2 year UG SSH Undeclared                  | SSH                 |  |

|                                                  |          |                                                           |   |   |                                                                                                            |  |  |                                                                                         |                                                             |                     |  |
|--------------------------------------------------|----------|-----------------------------------------------------------|---|---|------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|--|
| 143                                              | ECON 325 | International Trade                                       | 3 | 6 | ECON 201 Intermediate Microeconomics (133) (C- and above)                                                  |  |  | 3 year UG SSH Economics, 5 year UG SSH                                                  | 4 year UG SSH Economics                                     | SSH                 |  |
| 144                                              | ECON 326 | The Economics of Financial Markets                        | 3 | 6 | ECON 201 Intermediate Microeconomics (133) (C- and above)                                                  |  |  | 3 year UG SSH Economics, 5 year UG SSH                                                  | 4 year UG SSH Economics                                     | SSH                 |  |
| 145                                              | ECON 333 | Political Economy                                         | 3 | 6 | ECON 201 Intermediate Microeconomics (133) (C- and above)                                                  |  |  | 3 year UG SSH Economics, 5 year UG SSH                                                  | 4 year UG SSH Economics                                     | SSH                 |  |
| 146                                              | ECON 335 | Economics of Information                                  | 3 | 6 | ECON 201 Intermediate Microeconomics (133) (C- and above)                                                  |  |  | 3 year UG SSH Economics, 5 year UG SSH                                                  | 4 year UG SSH Economics                                     | SSH                 |  |
| 147                                              | ECON 403 | Introduction to Contract Theory and Auctions              | 3 | 6 | ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above) |  |  | Economics                                                                               | SSH                                                         | SEDS, SMG, SoM      |  |
| 148                                              | ECON 413 | Econometrics II Time Series                               | 3 | 6 | ECON 301 Econometrics I (664) (C- and above)                                                               |  |  | Economics                                                                               | SSH                                                         | SEDS, SMG, SoM      |  |
| 149                                              | ECON 416 | Empirical Industrial Organization                         | 3 | 6 | ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above) |  |  | Economics                                                                               | SSH                                                         | SEDS, SMG, SoM      |  |
| 150                                              | ECON 433 | Econometrics II Panel Data                                | 3 | 6 | ECON 301 Econometrics I (664) (C- and above)                                                               |  |  | Economics                                                                               | SSH                                                         | SEDS, SMG, SoM      |  |
| <b>History, Philosophy and Religious Studies</b> |          |                                                           |   |   |                                                                                                            |  |  |                                                                                         |                                                             |                     |  |
| 151                                              | HST 100  | History of Kazakhstan                                     | 3 | 6 |                                                                                                            |  |  | 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH             | 1 year UG SEDS, 1 year UG SMG, 1 year UG SOM, 1 year UG SSH | SEDS, SMG, SSH, SoM |  |
| 152                                              | HST 131  | European History I (to 1700)                              | 3 | 6 |                                                                                                            |  |  | 5 year UG SEDS, 5 year UG SSH, Undeclared SEDS, Undeclared SMG, Undeclared SSH          | SEDS, SMG, SSH, SoM                                         |                     |  |
| 153                                              | HST 242  | History of the Soviet Union: Politics, Society, Culture   | 3 | 6 |                                                                                                            |  |  | 5 year UG SEDS, 5 year UG SSH, Undeclared SEDS, Undeclared SMG, Undeclared SSH          | SEDS, SMG, SSH, SoM                                         |                     |  |
| 154                                              | HST 399  | Independent Study                                         | 3 | 6 |                                                                                                            |  |  | Instructor's Permission Required. Registration through Add Course form only!            |                                                             |                     |  |
| 155                                              | HST 433  | Empire, Nation and Identity in Nineteenth-Century Eurasia | 3 | 6 | HST 100 History of Kazakhstan (172) (C- and above)                                                         |  |  | 5 year UG SEDS, 5 year UG SSH, History, Undeclared SEDS, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM                                         |                     |  |

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| 156                                                                                         | HST 435         | Stalinist Central Asia                   | 3 | 6 |                                                                                                                                                  |  |  | 5 year UG SEDS, 5 year UG SSH, History, Undeclared SEDS, Undeclared SMG, Undeclared SSH                                                                                                                                                                                                        | SEDS, SMG, SSH, SoM                                                            |                     |  |
| 157                                                                                         | HST 498         | Directed Reading                         | 3 | 6 |                                                                                                                                                  |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                                                                                                                                   |                                                                                |                     |  |
| 158                                                                                         | PHIL 141        | Critical Thinking                        | 3 | 6 |                                                                                                                                                  |  |  | SEDS, SMG, SSH, SoM                                                                                                                                                                                                                                                                            |                                                                                |                     |  |
| 159                                                                                         | PHIL 210        | Ethics                                   | 3 | 6 |                                                                                                                                                  |  |  | 5 year UG SEDS, 5 year UG SSH, Chemical Engineering, Chemical and Materials Engineering, Civil Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Electrical and Electronic Engineering, Mechanical Engineering, Mechanical and Aerospace Engineering, SMG | SEDS, SSH, SoM                                                                 |                     |  |
| 160                                                                                         | PHIL 225        | Truth and Reality                        | 3 | 6 |                                                                                                                                                  |  |  | SEDS, SMG, SSH, SoM                                                                                                                                                                                                                                                                            |                                                                                |                     |  |
| 161                                                                                         | PHIL 240        | Formal Logic                             | 3 | 6 |                                                                                                                                                  |  |  | SEDS, SMG, SSH, SoM                                                                                                                                                                                                                                                                            |                                                                                |                     |  |
| 162                                                                                         | PHIL 314        | Free Will and Moral Responsibility       | 3 | 6 |                                                                                                                                                  |  |  | SEDS, SMG, SSH, SoM                                                                                                                                                                                                                                                                            |                                                                                |                     |  |
| 163                                                                                         | PHIL 361        | Philosophy of Language                   | 3 | 6 |                                                                                                                                                  |  |  | SEDS, SMG, SSH, SoM                                                                                                                                                                                                                                                                            |                                                                                |                     |  |
| <b>History, Philosophy and Religious Studies, History, Philosophy and Religious Studies</b> |                 |                                          |   |   |                                                                                                                                                  |  |  |                                                                                                                                                                                                                                                                                                |                                                                                |                     |  |
| 164                                                                                         | REL 110/HST 110 | Introduction to World Religions          | 3 | 6 |                                                                                                                                                  |  |  | 5 year UG SEDS, 5 year UG SSH, History, Undeclared SEDS, Undeclared SMG, Undeclared SSH                                                                                                                                                                                                        | SEDS, SMG, SSH, SoM                                                            |                     |  |
| <b>History, Philosophy and Religious Studies, Languages, Literature and Linguistics</b>     |                 |                                          |   |   |                                                                                                                                                  |  |  |                                                                                                                                                                                                                                                                                                |                                                                                |                     |  |
| 165                                                                                         | HST 274/WLL 274 | Texts and Contexts                       | 3 | 6 |                                                                                                                                                  |  |  | History, World Languages, Literatures and Cultures                                                                                                                                                                                                                                             | 5 year UG SEDS, 5 year UG SSH, Undeclared SEDS, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM |  |
| 166                                                                                         | HST 441/WLL 441 | Utopias in Russian and Soviet Literature | 3 | 6 | Subject "HST" BETWEEN 200 and 299 OR Subject "HST" BETWEEN 300 and 399 OR Subject "WLL" BETWEEN 200 and 299 OR Subject "WLL" BETWEEN 300 and 399 |  |  | History, World Languages, Literatures and Cultures                                                                                                                                                                                                                                             | 5 year UG SEDS, 5 year UG SSH, Undeclared SEDS, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM |  |
| <b>History, Philosophy and Religious Studies, Sociology and Anthropology</b>                |                 |                                          |   |   |                                                                                                                                                  |  |  |                                                                                                                                                                                                                                                                                                |                                                                                |                     |  |

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|-------------------------------------------|-----------------------|---------------------------------------------------|---|---|----------------------------------------------------------------------------------------|--|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|--|
| 167                                       | ANT<br>215/REL<br>215 | What is Islam?<br>Anthropological<br>Perspectives | 3 | 6 |                                                                                        |  |                                                                      | 5 year UG SEDS, 5 year<br>UG SSH, Anthropology,<br>Sociology, Undeclared<br>SEDS, Undeclared SMG,<br>Undeclared SSH                                 | 2 year UG SSH          | SEDS, SMG,<br>SSH, SoM |  |
| <b>Kazakh Language and Turkic Studies</b> |                       |                                                   |   |   |                                                                                        |  |                                                                      |                                                                                                                                                     |                        |                        |  |
| 168                                       | KAZ 001               | Kazakh Language<br>Placement Test                 | 0 | 0 |                                                                                        |  |                                                                      |                                                                                                                                                     |                        |                        |  |
| 169                                       | KAZ 201               | Academic Kazakh I                                 | 3 | 6 | KAZ 150 Basic Kazakh<br>(1215) (C- and above) OR<br>KLL "[B1.2] Intermediate"          |  |                                                                      | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |
| 170                                       | KAZ 202               | Academic Kazakh II                                | 3 | 6 | KAZ 201 Academic<br>Kazakh I (4561) (C- and<br>above) OR KLL "[B2.2]<br>Upper-Interm." |  |                                                                      | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |
| 171                                       | KAZ 211               | Academic Speaking in<br>Kazakh                    | 3 | 6 | KAZ 202 Academic<br>Kazakh II (4562) (C- and<br>above) OR KLL "[C1.1]<br>Advanced"     |  | KAZ 212<br>Academic<br>Writing in<br>Kazakh (703)<br>(C- and above)  | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |
| 172                                       | KAZ 212               | Academic Writing in<br>Kazakh                     | 3 | 6 | KAZ 202 Academic<br>Kazakh II (4562) (C- and<br>above) OR KLL "[C1.1]<br>Advanced"     |  | KAZ 211<br>Academic<br>Speaking in<br>Kazakh (702)<br>(C- and above) | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |
| 173                                       | KAZ 313               | Kazakh for Business                               | 3 | 6 | KAZ 202 Academic<br>Kazakh II (4562) (C- and<br>above) OR KLL "[C1.1]<br>Advanced"     |  |                                                                      | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |
| 174                                       | KAZ 351               | Kazakh Short Stories                              | 3 | 6 | KAZ 202 Academic<br>Kazakh II (4562) (C- and<br>above) OR KLL "[C1.1]<br>Advanced"     |  |                                                                      | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |
| 175                                       | KAZ 356               | Kazakh Music History                              | 3 | 6 | KAZ 202 Academic<br>Kazakh II (4562) (C- and<br>above) OR KLL "[C1.1]<br>Advanced"     |  |                                                                      | 1 year UG SMG, 1 year<br>UG SOM, 2 year UG SEDS<br>Undeclared, 4 year UG<br>SEDS, 4 year UG SMG, 4<br>year UG SSH, 5 year UG<br>SEDS, 5 year UG SSH | SEDS, SMG, SSH,<br>SoM |                        |  |



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|-----|---------|-------------------------------------------|---|---|---------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--|--|
| 176 | KAZ 357 | Literature of Alash                       | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 177 | KAZ 363 | Language and Globalization                | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 178 | KAZ 364 | Kazakh for Civil Service                  | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 179 | KAZ 366 | Kazakh Language for Engineers             | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 180 | KAZ 368 | Onomastics: History and Function of Names | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 181 | KAZ 371 | Contemporary Kazakh Literature            | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 182 | KAZ 373 | Kazakh Terminology                        | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH                                                | SEDS, SMG, SSH, SoM |  |  |
| 183 | KAZ 374 | Kazakh Diplomacy                          | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |

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|----------------------------------------------------------------------------------|------------------|---------------------------------------------------------------|---|---|---------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------------------|--|
| 184                                                                              | KAZ 376          | Language and Culture                                          | 3 | 6 | KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced" |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH            | SEDS, SMG, SSH, SoM                                       |                     |  |
| 185                                                                              | KAZ 410          | Kazakh literature of the XV-XIX centuries                     | 3 | 6 | Subject "KAZ" BETWEEN 300 and 399 OR Subject "KAZ" BETWEEN 300 and 399    |  |  | 1 year UG SMG, 1 year UG SOM, 2 year UG SEDS Undeclared, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH            | SEDS, SMG, SSH, SoM                                       |                     |  |
| 186                                                                              | KFL 101          | Elementary Kazakh as a Foreign Language I                     | 4 | 8 |                                                                           |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                                    |                                                           |                     |  |
| 187                                                                              | TUR 100          | Languages, Cultures, and Communities of the Turkic World      | 3 | 6 |                                                                           |  |  | SEDS, SMG, SSH, SoM                                                                                                                             |                                                           |                     |  |
| 188                                                                              | TUR 230          | Literatures of Central Asia                                   | 3 | 6 |                                                                           |  |  | SEDS, SMG, SSH, SoM                                                                                                                             |                                                           |                     |  |
| 189                                                                              | TUR 231          | Istanbul in Literature and Culture                            | 3 | 6 |                                                                           |  |  | SEDS, SMG, SSH, SoM                                                                                                                             |                                                           |                     |  |
| 190                                                                              | TUR 411          | Advanced Readings in Turkish Literature                       | 3 | 6 |                                                                           |  |  | SEDS, SMG, SSH, SoM                                                                                                                             |                                                           |                     |  |
| 191                                                                              | TUR 451          | The Turkish Novel                                             | 3 | 6 |                                                                           |  |  | SEDS, SMG, SSH, SoM                                                                                                                             |                                                           |                     |  |
| <b>Kazakh Language and Turkic Studies, Languages, Literature and Linguistics</b> |                  |                                                               |   |   |                                                                           |  |  |                                                                                                                                                 |                                                           |                     |  |
| 192                                                                              | LING 280/TUR 280 | Introduction to Turkic Historical and Comparative Linguistics | 3 | 6 |                                                                           |  |  | 5 year UG SEDS, 5 year UG SSH, World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH                              | SEDS, SMG, SSH, SoM |  |
| <b>Languages, Literature and Linguistics</b>                                     |                  |                                                               |   |   |                                                                           |  |  |                                                                                                                                                 |                                                           |                     |  |
| 193                                                                              | CHN 102          | Beginning Mandarin II                                         | 4 | 8 | CHN 101 Beginning Mandarin I (1384) (C and above)                         |  |  | 2 year UG SSH World Languages, Literatures and Cultures, 3 year UG SSH World Languages, Literatures and Cultures, 5 year UG SEDS, 5 year UG SSH | 1 year UG SEDS Undeclared, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM |  |
| 194                                                                              | CHN 201          | Intermediate Mandarin I                                       | 4 | 8 | CHN 102 Beginning Mandarin II (1844) (C and above)                        |  |  | World Languages, Literatures and Cultures                                                                                                       | SSH                                                       | SEDS, SMG, SoM      |  |
| 195                                                                              | FRE 101          | Beginning French I                                            | 4 | 8 |                                                                           |  |  | SEDS, SMG, SSH, SoM                                                                                                                             |                                                           |                     |  |
| 196                                                                              | FRE 102          | Beginning French II                                           | 4 | 8 | FRE 101 Beginning French I (246) (C- and above)                           |  |  | World Languages, Literatures and Cultures                                                                                                       | SSH                                                       | SEDS, SMG, SoM      |  |
| 197                                                                              | FRE 202          | Intermediate French II                                        | 4 | 8 | FRE 201 Intermediate French I (667) (C- and above)                        |  |  | World Languages, Literatures and Cultures                                                                                                       | SSH                                                       | SEDS, SMG, SoM      |  |

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|-----|----------|-----------------------------------------------------------------------------------|---|---|-----------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------|----------------------------------------------|---------------------|--|
| 198 | GER 102  | Beginning German II                                                               | 4 | 8 | GER 101 Beginning German (3173) (C- and above)                                                                                          |  |  | World Languages, Literatures and Cultures                                                                        | SSH                                          | SEDS, SMG, SoM      |  |
| 199 | GER 201  | Intermediate German I                                                             | 4 | 8 | GER 102 Beginning German II (3335) (C- and above)                                                                                       |  |  | World Languages, Literatures and Cultures                                                                        | SSH                                          | SEDS, SMG, SoM      |  |
| 200 | KOR 101  | Beginning Korean I                                                                | 4 | 8 |                                                                                                                                         |  |  | 2 year UG SSH World Languages, Literatures and Cultures, 3 year UG SSH World Languages, Literatures and Cultures | 2 year UG SSH, 3 year UG SSH, Undeclared SSH |                     |  |
| 201 | KOR 201  | Intermediate Korean I                                                             | 4 | 8 | KOR 102 Beginning Korean II (4791) (C- and above)                                                                                       |  |  | World Languages, Literatures and Cultures                                                                        | SSH                                          |                     |  |
| 202 | KOR 301  | Advanced Korean I                                                                 | 4 | 8 | KOR 202 Intermediate Korean II (5060) (C- and above)                                                                                    |  |  | World Languages, Literatures and Cultures                                                                        | SSH                                          |                     |  |
| 203 | LING 131 | Introduction to Linguistics                                                       | 3 | 6 |                                                                                                                                         |  |  | Undeclared SSH                                                                                                   | World Languages, Literatures and Cultures    | SEDS, SMG, SSH, SoM |  |
| 204 | LING 240 | Introduction to Sociolinguistics                                                  | 3 | 6 | LING 130 Introduction to Language and Communication (4014) (C- and above) OR LING 131 Introduction to Linguistics (1394) (C- and above) |  |  | Undeclared SSH                                                                                                   | World Languages, Literatures and Cultures    | SEDS, SMG, SSH, SoM |  |
| 205 | LING 272 | Language and the Mind                                                             | 3 | 6 |                                                                                                                                         |  |  | World Languages, Literatures and Cultures                                                                        | SEDS, SMG, SSH, SoM                          |                     |  |
| 206 | LING 277 | Language Diversity and Language Universals                                        | 3 | 6 | LING 131 Introduction to Linguistics (1394) (C and above)                                                                               |  |  | World Languages, Literatures and Cultures                                                                        | 5 year UG SEDS, 5 year UG SSH                | SEDS, SMG, SSH, SoM |  |
| 207 | LING 278 | Sounds of the World's Languages                                                   | 3 | 6 |                                                                                                                                         |  |  | World Languages, Literatures and Cultures                                                                        | 5 year UG SEDS, 5 year UG SSH                | SEDS, SMG, SSH, SoM |  |
| 208 | LING 375 | The Art and Science of Analyzing Languages: Morphosyntax of the World's Languages | 3 | 6 | LING 131 Introduction to Linguistics (1394) (C- and above)                                                                              |  |  | World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH                 | SEDS, SMG, SSH, SoM |  |

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|-----|----------|-------------------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|--|
| 209 | LING 470 | Multilingualism and Language Contact            | 3 | 6 | LING 131 Introduction to Linguistics (1394) (C- and above) OR LING 270 Languages of Eurasia (2485) (C- and above) OR ANT 277/WLL 271 Language and Society (1027) (C- and above) OR LING 272 Language and the Mind (1847) (C- and above) OR LING 273 Survey of Research Methods in Linguistics (2158) (C- and above) OR LING 274 Introduction to Applied Linguistics (2486) (C- and above) OR LING 275 Second Language Acquisition Theory and Research I (4473) (C- and above) |  |  | World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH | SEDS, SMG, SSH, SoM |  |
| 210 | SPA 101  | Beginning Spanish I                             | 4 | 8 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | 2 year UG SSH World Languages, Literatures and Cultures, 3 year UG SSH World Languages, Literatures and Cultures | SSH                          | SEDS, SMG, SoM      |  |
| 211 | SPA 201  | Intermediate Spanish I                          | 4 | 8 | SPA 102 Beginning Spanish II (1128) (C- and above)                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  | World Languages, Literatures and Cultures                                                                        | SSH                          | SEDS, SMG, SoM      |  |
| 212 | SPA 314  | Advanced Spanish Grammar and Composition        | 3 | 6 | SPA 202 Intermediate Spanish II (1842) (C- and above)                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  | World Languages, Literatures and Cultures                                                                        | SSH                          | SEDS, SMG, SoM      |  |
| 213 | WLL 110  | Introduction to Literary Studies                | 3 | 6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | 5 year UG SEDS, 5 year UG SSH, World Languages, Literatures and Cultures                                         | Undeclared SSH               | SEDS, SMG, SSH, SoM |  |
| 214 | WLL 121  | Introduction to Cultural Studies                | 3 | 6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | 5 year UG SEDS, 5 year UG SSH, World Languages, Literatures and Cultures                                         | Undeclared SSH               | SEDS, SMG, SSH, SoM |  |
| 215 | WLL 201  | World Literature I                              | 3 | 6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH | SEDS, SMG, SSH, SoM |  |
| 216 | WLL 209  | Introduction to Translation Studies             | 3 | 6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH | SEDS, SMG, SSH, SoM |  |
| 217 | WLL 244  | Survey of Nineteenth-Century Russian Literature | 3 | 6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH | SEDS, SMG, SSH, SoM |  |
| 218 | WLL 248  | Survey of Soviet Literature and Culture         | 3 | 6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | World Languages, Literatures and Cultures                                                                        | 2 year UG SSH, 3 year UG SSH | SEDS, SMG, SSH, SoM |  |

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|-------------------------------------------------------------------------------------|-----------------|----------------------------------------------------|---|---|--------------------------------------------------------------------------|------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------|--|
| 219                                                                                 | WLL 400         | Research Assistance in Linguistics and Literature  | 1 | 2 | LING 273 Survey of Research Methods in Linguistics (2158) (C- and above) |                                          |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                                    |                                                                                                                  |                     |  |
| 220                                                                                 | WLL 498         | Languages, Linguistics, and Literatures Capstone I | 3 | 6 |                                                                          |                                          |  | 4 year UG SSH World Languages, Literatures and Cultures                                                                                                                                         |                                                                                                                  |                     |  |
| <b>Languages, Literature and Linguistics, Languages, Literature and Linguistics</b> |                 |                                                    |   |   |                                                                          |                                          |  |                                                                                                                                                                                                 |                                                                                                                  |                     |  |
| 221                                                                                 | SPA 351/WLL 351 | Literature and Film of the Postcolonial World      | 3 | 6 | Subject "WLL" BETWEEN 200 and 299                                        |                                          |  | World Languages, Literatures and Cultures                                                                                                                                                       | SSH                                                                                                              | SEDS, SMG, SoM      |  |
| <b>Mathematics</b>                                                                  |                 |                                                    |   |   |                                                                          |                                          |  |                                                                                                                                                                                                 |                                                                                                                  |                     |  |
| 222                                                                                 | MATH 161        | Calculus I                                         | 4 | 8 |                                                                          |                                          |  | 1 year UG SEDS, 1 year UG SMG, 1 year UG SSH Biological Sciences, 1 year UG SSH Chemistry, 1 year UG SSH Mathematics, 1 year UG SSH Physics                                                     | Biological Sciences, Chemistry, Mathematics, Physics, SEDS, SMG                                                  | SSH, SoM            |  |
| 223                                                                                 | MATH 162        | Calculus II                                        | 4 | 8 | MATH 161 Calculus I (118) (C and above)                                  |                                          |  | 2 year UG SEDS Undeclared, 5 year UG SEDS, 5 year UG SSH, Undeclared SSH                                                                                                                        | 2 year UG SSH Biological Sciences, 3 year UG SSH Biological Sciences, Chemistry, Mathematics, Physics, SEDS, SMG | SSH, SoM            |  |
| 224                                                                                 | MATH 251        | Discrete Mathematics                               | 3 | 6 | MATH 161 Calculus I (118) (C and above)                                  |                                          |  | 2 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SSH                                                                                                                                  | Computer Science, Mathematics                                                                                    | SEDS, SMG, SSH, SoM |  |
| 225                                                                                 | MATH 263        | Calculus III                                       | 4 | 8 | MATH 162 Calculus II (170) (C and above)                                 |                                          |  | 2 year UG SSH Mathematics, 2 year UG SSH Physics, 5 year UG SEDS, 5 year UG SSH                                                                                                                 | Mathematics, Physics                                                                                             | SEDS, SMG, SSH, SoM |  |
| 226                                                                                 | MATH 273        | Linear Algebra with Applications                   | 4 | 8 | MATH 161 Calculus I (118) (C and above)                                  | MATH 162 Calculus II (170) (C and above) |  | 2 year UG SEDS Computer Science, 2 year UG SEDS Robotics Engineering, 2 year UG SEDS Robotics and Mechatronics, 2 year UG SSH Mathematics, 2 year UG SSH Physics, 5 year UG SEDS, 5 year UG SSH | Chemistry, Computer Science, Mathematics, Physics, Robotics Engineering, Robotics and Mechatronics               | SEDS, SMG, SSH, SoM |  |
| 227                                                                                 | MATH 274        | Introduction to Differential Equations             | 3 | 6 | MATH 162 Calculus II (170) (C and above)                                 |                                          |  | 5 year UG SEDS, 5 year UG SSH, Physics                                                                                                                                                          | Chemistry, Mathematics, Robotics Engineering, Robotics and Mechatronics                                          | SEDS, SMG, SSH, SoM |  |

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|-----|----------|--------------------------------------|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------|---------------------|--|
| 228 | MATH 302 | Abstract Algebra I                   | 3 | 6 | MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)                                                                                       |  |                                                                                                         | 5 year UG SEDS, 5 year UG SSH, Mathematics                                                  | SEDS, SMG, SSH, SoM |                     |  |
| 229 | MATH 310 | Applied Statistical Methods          | 3 | 6 | MATH 161 Calculus I (118) (C and above)                                                                                                                                                                 |  | MATH 321 Probability (482) (C and above)                                                                | 2 year UG SMG Mining Engineering, 5 year UG SEDS, 5 year UG SSH, Biological Sciences        | SEDS, SMG, SSH, SoM |                     |  |
| 230 | MATH 321 | Probability                          | 3 | 6 | MATH 162 Calculus II (170) (C and above)                                                                                                                                                                |  | ECON 211 Economic Statistics (2280) (C- and above) OR PLS 211 Quantitative Methods (221) (C- and above) | 5 year UG SEDS, 5 year UG SSH, Mathematics, Robotics Engineering, Robotics and Mechatronics | Computer Science    | SEDS, SMG, SSH, SoM |  |
| 231 | MATH 322 | Mathematical Statistics              | 3 | 6 | MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above)                                                                                                           |  |                                                                                                         | 5 year UG SEDS, 5 year UG SSH, Mathematics, Robotics Engineering, Robotics and Mechatronics | Computer Science    | SEDS, SMG, SSH, SoM |  |
| 232 | MATH 323 | Actuarial Mathematics I              | 3 | 6 | MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above) OR (MATH 162 Calculus II (170) (C and above) AND MATH 310 Applied Statistical Methods (82) (C and above)) |  |                                                                                                         | 5 year UG SEDS, 5 year UG SSH, Mathematics                                                  | SEDS, SMG, SSH, SoM |                     |  |
| 233 | MATH 351 | Numerical Methods with Applications  | 3 | 6 | MATH 274 Introduction to Differential Equations (484) (C and above) AND MATH 263 Calculus III (81) (C and above)                                                                                        |  | ENG 202 Numerical Methods in Engineering (5506) (C and above)                                           | 5 year UG SEDS, 5 year UG SSH, Mathematics                                                  | SEDS, SMG, SSH, SoM |                     |  |
| 234 | MATH 361 | Real Analysis I                      | 3 | 6 | MATH 263 Calculus III (81) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)                                                                                                           |  |                                                                                                         | 5 year UG SEDS, 5 year UG SSH, Mathematics                                                  | SEDS, SMG, SSH, SoM |                     |  |
| 235 | MATH 371 | Introduction to Mathematical Biology | 3 | 6 | MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 274 Introduction to Differential Equations (484) (C and above)                                                                    |  |                                                                                                         | 5 year UG SEDS, 5 year UG SSH, Mathematics                                                  | SEDS, SMG, SSH, SoM |                     |  |

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|-----|----------|----------------------------------|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------|--|--|
| 236 | MATH 412 | Nonlinear Optimization           | 3 | 6 | MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 263 Calculus III (81) (C and above)                                                                                                                               |                                               |                                                                                                                    | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 237 | MATH 417 | Cryptography                     | 3 | 6 | MATH 273 Linear Algebra with Applications (84) (C and above) AND (MATH 251 Discrete Mathematics (85) (C and above) OR MATH 301 Introduction to Number Theory (613) (C and above) OR MATH 355 Introduction to Proofs (86) (C and above)) |                                               |                                                                                                                    | SEDS, SMG, SSH                                                               |                     |  |  |
| 238 | MATH 425 | Stochastic Processes             | 3 | 6 | MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above)                                                                                                                                           |                                               |                                                                                                                    | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 239 | MATH 440 | Regression Analysis              | 3 | 6 | MATH 322 Mathematical Statistics (1165) (C and above)                                                                                                                                                                                   |                                               | SOC 203 Quantitative Methods in Sociology (1377) (C and above) OR PLS 211 Quantitative Methods (221) (C and above) | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 240 | MATH 471 | Nonlinear Differential Equations | 3 | 6 | MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 274 Introduction to Differential Equations (484) (C and above)                                                                                                    |                                               |                                                                                                                    | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 241 | MATH 477 | Applied Finite Element Methods   | 3 | 6 | MATH 351 Numerical Methods with Applications (1166) (C and above)                                                                                                                                                                       |                                               |                                                                                                                    | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 242 | MATH 480 | Complex Analysis                 | 3 | 6 | MATH 263 Calculus III (81) (C and above)                                                                                                                                                                                                |                                               |                                                                                                                    | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 243 | MATH 481 | Partial Differential Equations   | 3 | 6 | MATH 274 Introduction to Differential Equations (484) (C and above)                                                                                                                                                                     | MATH 480 Complex Analysis (618) (C and above) |                                                                                                                    | 5 year UG SEDS, 5 year UG SSH, Mathematics                                   | SEDS, SMG, SSH, SoM |  |  |
| 244 | MATH 490 | Special Topics in Mathematics I  | 3 | 6 |                                                                                                                                                                                                                                         |                                               |                                                                                                                    | Instructor's Permission Required. Registration through Add Course form only! |                     |  |  |

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| 245            | MATH 491 | Special Topics in Mathematics II                       | 3 | 6 |                                                                                                                                                                                                                                                                                          |                                         |                                                                             | Instructor's Permission Required. Registration through Add Course form only! |                     |  |  |
| 246            | MATH 497 | Directed Study in Mathematics I                        | 3 | 6 |                                                                                                                                                                                                                                                                                          |                                         |                                                                             | Instructor's Permission Required. Registration through Add Course form only! |                     |  |  |
| <b>Physics</b> |          |                                                        |   |   |                                                                                                                                                                                                                                                                                          |                                         |                                                                             |                                                                              |                     |  |  |
| 247            | PHYS 161 | Physics I for Scientists and Engineers with Laboratory | 4 | 8 |                                                                                                                                                                                                                                                                                          | MATH 161 Calculus I (118) (C and above) | PHYS 171 Physics I for Physics Majors with Laboratory (1401) (C- and above) | SEDS, SMG, SSH, SoM                                                          |                     |  |  |
| 248            | PHYS 221 | Classical Mechanics I                                  | 3 | 6 | (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above)) AND MATH 273 Linear Algebra with Applications (84) (C- and above)                                                |                                         |                                                                             | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM |  |  |
| 249            | PHYS 261 | Modern Physics with laboratory                         | 4 | 8 | MATH 162 Calculus II (170) (C- and above) AND (PHYS 152 Introductory Physics II with Lab (1176) (C- and above) OR PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above)) |                                         |                                                                             | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM |  |  |
| 250            | PHYS 315 | Mathematical Methods of Physics                        | 3 | 6 | (PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above) OR PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above)) AND MATH 274 Introduction to Differential Equations (484) (C- and above)                                         |                                         |                                                                             | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM |  |  |



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| 251                                                  | PHYS 361 | Classical Electrodynamics I                                           | 3 | 6 |  | PHYS 315 Mathematical Methods of Physics (653) (D and above) OR PHYS 411 Advanced Mathematical Physics (3142) (D and above)                                                                                                                                                                                |  | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM                                  |                     |  |
| 252                                                  | PHYS 395 | Research Methods                                                      | 3 | 6 |  |                                                                                                                                                                                                                                                                                                            |  | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM                                  |                     |  |
| 253                                                  | PHYS 452 | Quantum Mechanics II                                                  | 3 | 6 |  | PHYS 451 Quantum Mechanics I (1415) (C- and above)                                                                                                                                                                                                                                                         |  | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM                                  |                     |  |
| 254                                                  | PHYS 473 | Introduction to Solid State Physics                                   | 4 | 8 |  | PHYS 261 Modern Physics with laboratory (125) (C- and above) OR CHEM 331 Physical Chemistry I (634) (C- and above) OR MAE 301 Engineering Thermodynamics (5927) (C- and above) OR CHME 201 Chemical Engineering Thermodynamics (5007) (C- and above) OR ELCE 204 Solid State Devices (5508) (C- and above) |  | 5 year UG SEDS, 5 year UG SSH, Physics                                       | SEDS, SMG, SSH, SoM                                  |                     |  |
| 255                                                  | PHYS 491 | Directed Study of Advanced Physics Topics                             | 3 | 6 |  |                                                                                                                                                                                                                                                                                                            |  | Instructor's Permission Required. Registration through Add Course form only! |                                                      |                     |  |
| 256                                                  | PHYS 498 | Honors Thesis Research                                                | 0 | 0 |  |                                                                                                                                                                                                                                                                                                            |  | 5 year UG SEDS, 5 year UG SSH, Physics                                       |                                                      |                     |  |
| <b>Political Science and International Relations</b> |          |                                                                       |   |   |  |                                                                                                                                                                                                                                                                                                            |  |                                                                              |                                                      |                     |  |
| 257                                                  | PLS 100  | Introduction to the Politics of Central Asia                          | 3 | 6 |  |                                                                                                                                                                                                                                                                                                            |  | 5 year UG SEDS, SSH                                                          | SEDS, SMG, SoM                                       |                     |  |
| 258                                                  | PLS 101  | Introduction to Political Science                                     | 3 | 6 |  |                                                                                                                                                                                                                                                                                                            |  | 5 year UG SSH, SEDS, SMG                                                     | Biological Sciences, Chemistry, Mathematics, Physics | SSH                 |  |
| 259                                                  | PLS 102  | The Political Challenges of Technologies and Science: An Introduction | 3 | 6 |  |                                                                                                                                                                                                                                                                                                            |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | Undeclared SEDS, Undeclared SMG, Undeclared SSH      | SEDS, SMG, SSH, SoM |  |
| 260                                                  | PLS 120  | Introduction to Political Theory                                      | 3 | 6 |  |                                                                                                                                                                                                                                                                                                            |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | Undeclared SEDS, Undeclared SMG, Undeclared SSH      | SEDS, SMG, SSH, SoM |  |

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| 261 | PLS 140 | Introduction to Comparative Politics                    | 3 | 6 |                                                                                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | Undeclared SEDS, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM |  |
| 262 | PLS 150 | Introduction to International Relations                 | 3 | 6 |                                                                                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | Undeclared SEDS, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM |  |
| 263 | PLS 210 | Political Science Research Methods                      | 3 | 6 |                                                                                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 264 | PLS 211 | Quantitative Methods                                    | 3 | 6 |                                                                                                                                                                                                |  | ECON 211 Economic Statistics (2280) (C- and above) | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 265 | PLS 320 | Feminist Political Theory                               | 3 | 6 | PLS 120 Introduction to Political Theory (512) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)                                                              |  |                                                    |                                                                              |                                                 |                     |  |
| 266 | PLS 326 | Modern Political Theory                                 | 3 | 6 | PLS 120 Introduction to Political Theory (512) (C- and above)                                                                                                                                  |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 267 | PLS 341 | Politics of Development                                 | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above)                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 268 | PLS 342 | Political Corruption                                    | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above)                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 269 | PLS 345 | Revolutions, Social Movements, and Contentious Politics | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above)                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 270 | PLS 351 | International Political Economy                         | 3 | 6 | PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above) |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |
| 271 | PLS 370 | Law, Politics and Society                               | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above)                                                                                                                                |  |                                                    | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM                             |                     |  |

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| 272 | PLS 395 | Independent Study                       | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)                                                                                           |  |  | Instructor's Permission Required. Registration through Add Course form only! |                     |  |  |
| 273 | PLS 415 | Maximum Likelihood Models               | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above) OR PLS 211 Quantitative Methods (221) (C- and above)                                                                                            |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 274 | PLS 416 | Experimental Political Science          | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)                                                                                           |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 275 | PLS 422 | Just War Theory                         | 3 | 6 | PLS 120 Introduction to Political Theory (512) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)                                                                               |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 276 | PLS 432 | Comparative Democratization             | 3 | 6 | PLS 210 Political Science Research Methods (129) (C- and above)                                                                                                                                                 |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 277 | PLS 441 | Advanced Topics in Comparative Politics | 3 | 6 | PLS 140 Introduction to Comparative Politics (223) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)                                                                           |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 278 | PLS 445 | Political Violence                      | 3 | 6 | (PLS 140 Introduction to Comparative Politics (223) (C- and above) OR PLS 150 Introduction to International Relations (511) (C- and above)) AND PLS 210 Political Science Research Methods (129) (C- and above) |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 279 | PLS 458 | International Organization              | 3 | 6 | PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)                                                                        |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |
| 280 | PLS 460 | Environmental Politics                  | 3 | 6 |                                                                                                                                                                                                                 |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations | SEDS, SMG, SSH, SoM |  |  |

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| 281                               | PLS 469 | International Relations of Eurasia                                             | 3 | 6 | PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)          |  |  | 5 year UG SEDS, 5 year UG SSH, Political Science and International Relations                            | SEDS, SMG, SSH, SoM                                                                                      |                     |  |
| 282                               | PLS 495 | Research Practicum in PSIR                                                     | 1 | 2 | PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)                             |  |  | Instructor's Permission Required. Registration through Add Course form only!                            |                                                                                                          |                     |  |
| <b>SSH</b>                        |         |                                                                                |   |   |                                                                                                                                                   |  |  |                                                                                                         |                                                                                                          |                     |  |
| 283                               | SSH 300 | School of Sciences and Humanities Internship                                   | 3 | 6 |                                                                                                                                                   |  |  | Instructor's Permission Required. Registration through Add Course form only!                            |                                                                                                          |                     |  |
| 284                               | SSH 301 | School of Sciences and Humanities Internship: Second Experience                | 3 | 6 |                                                                                                                                                   |  |  | Instructor's Permission Required. Registration through Add Course form only!                            |                                                                                                          |                     |  |
| <b>Sociology and Anthropology</b> |         |                                                                                |   |   |                                                                                                                                                   |  |  |                                                                                                         |                                                                                                          |                     |  |
| 285                               | ANT 140 | World Prehistory                                                               | 3 | 6 |                                                                                                                                                   |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH | 2 year UG SSH                                                                                            | SEDS, SMG, SSH, SoM |  |
| 286                               | ANT 240 | Laboratory Methods in Archaeology                                              | 3 | 6 |                                                                                                                                                   |  |  | Anthropology                                                                                            | 2 year UG SSH, 5 year UG SEDS, 5 year UG SSH, Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH | SEDS, SMG, SSH, SoM |  |
| 287                               | ANT 262 | Monkey business: Primate Society and Behavior                                  | 3 | 6 |                                                                                                                                                   |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH | 2 year UG SSH                                                                                            | SEDS, SMG, SSH, SoM |  |
| 288                               | ANT 312 | The Anthropology of Conflict                                                   | 3 | 6 |                                                                                                                                                   |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Sociology                                                  | 2 year UG SSH                                                                                            | SEDS, SMG, SSH, SoM |  |
| 289                               | ANT 316 | Bazaars and Museums: Material and Cultural Heritage in Central Asia and Beyond | 3 | 6 | ANT 110 Introduction to Sociocultural Anthropology (501) (C- and above) OR Subject "ANT" BETWEEN 200 and 299 OR Subject "ANT" BETWEEN 200 and 299 |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Sociology                                                  | 2 year UG SSH                                                                                            | SEDS, SMG, SSH, SoM |  |

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| 290 | ANT 400 | Research Assistance in Anthropology | 1 | 2 |                                                                                                                                                                                           |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                    |                                                                                     |                     |  |
| 291 | ANT 401 | Research Assistance in Anthropology | 1 | 2 |                                                                                                                                                                                           |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                    |                                                                                     |                     |  |
| 292 | ANT 402 | Research Assistance in Anthropology | 1 | 2 |                                                                                                                                                                                           |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                    |                                                                                     |                     |  |
| 293 | ANT 421 | Sport and Construction of Identity  | 3 | 6 |                                                                                                                                                                                           |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Sociology                                                                                                                          | 2 year UG SSH                                                                       | SEDS, SMG, SSH, SoM |  |
| 294 | ANT 498 | Capstone Seminar I                  | 3 | 6 |                                                                                                                                                                                           |  |  | Instructor's Permission Required. Registration through Add Course form only!                                                                                                    |                                                                                     |                     |  |
| 295 | SOC 101 | Introduction to Sociology           | 3 | 6 |                                                                                                                                                                                           |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Applied Nursing, Medical Sciences, Nursing, Nursing (two year program), Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH | 2 year UG SSH, 3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences | SEDS, SMG, SSH, SoM |  |
| 296 | SOC 115 | Global Social Problems              | 3 | 6 |                                                                                                                                                                                           |  |  | 5 year UG SEDS, 5 year UG SSH, Anthropology, Sociology, Undeclared SEDS, Undeclared SMG, Undeclared SSH                                                                         | 1 year UG SSH, 2 year UG SSH, 3 year UG SSH                                         | SEDS, SMG, SSH, SoM |  |
| 297 | SOC 201 | Social Science Research Methods     | 3 | 6 |                                                                                                                                                                                           |  |  | Anthropology, Sociology                                                                                                                                                         | SSH                                                                                 | SEDS, SMG, SoM      |  |
| 298 | SOC 210 | Gender and Society                  | 3 | 6 |                                                                                                                                                                                           |  |  | Anthropology, Sociology                                                                                                                                                         | SSH                                                                                 | SEDS, SMG, SoM      |  |
| 299 | SOC 217 | Sociology of the Family             | 3 | 6 |                                                                                                                                                                                           |  |  | Anthropology, Sociology                                                                                                                                                         | SSH                                                                                 | SEDS, SMG, SoM      |  |
| 300 | SOC 301 | Classical Sociological Theory       | 3 | 6 | SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above) OR ANT 110 Introduction to Sociocultural Anthropology (501) (C- and above) |  |  | Anthropology, Sociology                                                                                                                                                         | SSH                                                                                 | SEDS, SMG, SoM      |  |

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| 301                                                           | SOC 310         | Social Inequality                                         | 3 | 6 | SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above) |  |  | Anthropology, Sociology                                                          | SSH                                | SEDS, SMG, SoM |  |
| 302                                                           | SOC 400         | Research Assistance in Sociology                          | 1 | 2 |                                                                                                                |  |  | Instructor's Permission Required. Registration through Add Course form only!     |                                    |                |  |
| 303                                                           | SOC 401         | Research Assistance in Sociology                          | 1 | 2 |                                                                                                                |  |  | Instructor's Permission Required. Registration through Add Course form only!     |                                    |                |  |
| 304                                                           | SOC 402         | Research Assistance in Sociology                          | 1 | 2 |                                                                                                                |  |  | Instructor's Permission Required. Registration through Add Course form only!     |                                    |                |  |
| 305                                                           | SOC 415         | Social Problems and Issues in Eurasia                     | 3 | 6 |                                                                                                                |  |  | Anthropology, Sociology                                                          | SSH                                | SEDS, SMG, SoM |  |
| 306                                                           | SOC 498         | Capstone Seminar Part I                                   | 3 | 6 |                                                                                                                |  |  | 4 year UG SSH Sociology                                                          |                                    |                |  |
| <b>Sociology and Anthropology, Sociology and Anthropology</b> |                 |                                                           |   |   |                                                                                                                |  |  |                                                                                  |                                    |                |  |
| 307                                                           | ANT 214/SOC 214 | Qualitative Methods                                       | 3 | 6 |                                                                                                                |  |  | Anthropology, Sociology                                                          | SSH                                | SEDS, SMG, SoM |  |
| <b>SEDS</b>                                                   |                 |                                                           |   |   |                                                                                                                |  |  |                                                                                  |                                    |                |  |
| <b>Chemical and Materials Engineering</b>                     |                 |                                                           |   |   |                                                                                                                |  |  |                                                                                  |                                    |                |  |
| 308                                                           | CHME 200        | Basic Principles and Calculations in Chemical Engineering | 3 | 6 |                                                                                                                |  |  | 2 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH | Chemical and Materials Engineering |                |  |
| 309                                                           | CHME 201        | Chemical Engineering Thermodynamics                       | 3 | 6 |                                                                                                                |  |  | 2 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH | Chemical and Materials Engineering |                |  |
| 310                                                           | CHME 222        | Inorganic and Analytical Chemistry                        | 3 | 6 |                                                                                                                |  |  | 2 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH | Chemical and Materials Engineering |                |  |
| 311                                                           | CHME 300        | Heat and Mass Transfer                                    | 3 | 6 |                                                                                                                |  |  | 3 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH | Chemical and Materials Engineering |                |  |
| 312                                                           | CHME 301        | Applied Mathematics for Process Design                    | 3 | 6 |                                                                                                                |  |  | 3 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH | Chemical and Materials Engineering |                |  |

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| 313                                        | CHME 302 | Instrumental Methods of Analysis for Engineers | 3 | 6 |                                                                                                                      |  |  | 3 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH                                                            | Chemical and Materials Engineering                                        |  |  |
| 314                                        | CHME 351 | Environment and Development                    | 3 | 6 |                                                                                                                      |  |  | 3 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH                                                            | Chemical and Materials Engineering                                        |  |  |
| 315                                        | CHME 353 | Electrochemical Engineering                    | 3 | 6 |                                                                                                                      |  |  | 3 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH                                                            | Chemical and Materials Engineering                                        |  |  |
| 316                                        | CHME 400 | Process Design and Simulation                  | 3 | 6 | CHME 300 Heat and Mass Transfer (5952) (D and above) AND CHME 304 Chemical Reaction Engineering (6168) (D and above) |  |  | 4 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH                                                            | Chemical and Materials Engineering                                        |  |  |
| 317                                        | CHME 401 | Chemical Engineering Lab II                    | 3 | 6 |                                                                                                                      |  |  | 4 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH                                                            | Chemical and Materials Engineering                                        |  |  |
| 318                                        | CHME 453 | Multiphase Systems                             | 3 | 6 | CHME 202 Fluid Mechanics (5543) (D and above)                                                                        |  |  | 4 year UG SEDS Chemical and Materials Engineering, 5 year UG SEDS, 5 year UG SSH                                                            | Chemical and Materials Engineering                                        |  |  |
| <b>Civil and Environmental Engineering</b> |          |                                                |   |   |                                                                                                                      |  |  |                                                                                                                                             |                                                                           |  |  |
| 319                                        | CEE 200  | Structural Mechanics I                         | 3 | 6 |                                                                                                                      |  |  | 2 year UG SEDS Civil and Environmental Engineering, 2 year UG SEDS Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH, SMG | Civil and Environmental Engineering, Mechanical and Aerospace Engineering |  |  |
| 320                                        | CEE 201  | Environmental Chemistry                        | 3 | 6 |                                                                                                                      |  |  | 2 year UG SEDS Civil and Environmental Engineering, 2 year UG SEDS Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH      | Civil and Environmental Engineering, Mechanical and Aerospace Engineering |  |  |
| 321                                        | CEE 204  | Civil Engineering CAD and Surveying            | 3 | 6 |                                                                                                                      |  |  | 2 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH                                                           | Civil and Environmental Engineering                                       |  |  |
| 322                                        | CEE 300  | Structural Design - Concrete                   | 3 | 6 | CEE 203 Structural Analysis (5500) (D and above)                                                                     |  |  | 3 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH                                                           | Civil and Environmental Engineering                                       |  |  |

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|-----|---------|--------------------------------------------------------------------|---|---|----------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------|-------------------------------------|--|--|
| 323 | CEE 302 | Geotechnical Engineering                                           | 3 | 6 |                                                                                                                      |  |  | 3 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 324 | CEE 304 | Fluid Mechanics                                                    | 3 | 6 |                                                                                                                      |  |  | 3 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 325 | CEE 306 | Civil Engineering Materials                                        | 3 | 6 | ENG 102 Engineering Materials I (4708) (D and above)                                                                 |  |  | 3 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 326 | CEE 401 | Construction Technology and Management                             | 3 | 6 | CEE 306 Civil Engineering Materials (5897) (D and above)                                                             |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 327 | CEE 450 | Behavior and Design of Structural System                           | 3 | 6 | CEE 300 Structural Design - Concrete (5895) (D and above) AND CEE 301 Structural Design - Steel (6157) (D and above) |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 328 | CEE 455 | Solid and Hazardous Waste Management                               | 3 | 6 | CEE 202 Environmental Engineering (5499) (D and above)                                                               |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 329 | CEE 460 | Water Supply and Distribution Management                           | 3 | 6 | CEE 305 Hydraulics and Hydrology (6177) (D and above)                                                                |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 330 | CEE 462 | Pavement Design and Performance                                    | 3 | 6 | CEE 306 Civil Engineering Materials (5897) (D and above) AND CEE 303 Geotechnical Design (6158) (D and above)        |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |
| 331 | CEE 463 | Individual Research Project in Civil & Environmental Engineering 1 | 3 | 6 |                                                                                                                      |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH |                                     |  |  |
| 332 | CEE 465 | Structure and Properties of Concrete Materials                     | 3 | 6 | CEE 306 Civil Engineering Materials (5897) (D and above)                                                             |  |  | 4 year UG SEDS Civil and Environmental Engineering, 5 year UG SEDS, 5 year UG SSH | Civil and Environmental Engineering |  |  |

**Computer Science**



|     |          |                                     |   |   |  |  |                                                                                                                                                                                                                                                                                              |                                                                            |                |  |  |
|-----|----------|-------------------------------------|---|---|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------|--|--|
| 333 | CSCI 111 | Web Programming and Problem Solving | 3 | 6 |  |  | CSCI 101<br>Introduction to Computational Sciences (147) (D and above)<br>OR CSCI 115<br>Programming Fundamentals (5257) (D and above) OR CSCI 151<br>Programming for Scientists and Engineers (192) (D and above) OR ENG 101<br>Programming for Engineers (4517) (D and above)              | 5 year UG SEDS, 5 year UG SSH, SSH                                         |                |  |  |
| 334 | CSCI 115 | Programming Fundamentals            | 4 | 8 |  |  | CSCI 101<br>Introduction to Computational Sciences (147) (D and above)<br>OR CSCI 111<br>Web Programming and Problem Solving (110) (D and above)<br>OR CSCI 151<br>Programming for Scientists and Engineers (192) (D and above) OR ENG 101<br>Programming for Engineers (4517) (D and above) | 5 year UG SEDS, 5 year UG SSH, Biological Sciences, Chemistry, Mathematics | Undeclared SSH |  |  |

|     |          |                                          |   |   |                                                                                                                                     |  |                                                                                                                                                                                       |                                                                                                                                  |  |  |  |
|-----|----------|------------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 335 | CSCI 151 | Programming for Scientists and Engineers | 4 | 8 |                                                                                                                                     |  | CSCI 111 Web Programming and Problem Solving (110) (D and above) OR CSCI 115 Programming Fundamentals (5257) (D and above) OR ENG 101 Programming for Engineers (4517) (B- and above) | 5 year UG SEDS, 5 year UG SSH, Computer Science, Physics, Robotics Engineering, Robotics and Mechatronics                        |  |  |  |
| 336 | CSCI 231 | Computer Systems and Organization        | 3 | 6 | CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR ENG 100 Introduction to Engineering (4518) (B- and above) |  |                                                                                                                                                                                       | 5 year UG SEDS, 5 year UG SSH, Computer Science                                                                                  |  |  |  |
| 337 | CSCI 235 | Programming Languages                    | 4 | 8 | CSCI 152 Performance and Data Structures (489) (C- and above)                                                                       |  |                                                                                                                                                                                       | 5 year UG SEDS, 5 year UG SSH, Computer Science                                                                                  |  |  |  |
| 338 | CSCI 281 | Human-Computer Interaction               | 3 | 6 | CSCI 152 Performance and Data Structures (489) (C- and above)                                                                       |  |                                                                                                                                                                                       | 5 year UG SEDS, 5 year UG SSH, Computer Science                                                                                  |  |  |  |
| 339 | CSCI 341 | Database Systems                         | 3 | 6 | CSCI 152 Performance and Data Structures (489) (C- and above)                                                                       |  |                                                                                                                                                                                       | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |  |  |  |
| 340 | CSCI 344 | Data Mining and Decision Support         | 3 | 6 | CSCI 341 Database Systems (195) (C- and above) AND MATH 273 Linear Algebra with Applications (84) (C- and above)                    |  |                                                                                                                                                                                       | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |  |  |  |
| 341 | CSCI 361 | Software Engineering                     | 3 | 6 | CSCI 152 Performance and Data Structures (489) (C- and above)                                                                       |  |                                                                                                                                                                                       | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |  |  |  |

|                                            |           |                                                   |   |    |                                                                                                                                     |                                                 |  |                                                                                                                                  |                                     |  |  |
|--------------------------------------------|-----------|---------------------------------------------------|---|----|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--|--|
| 342                                        | CSCI 390  | Artificial Intelligence                           | 3 | 6  | CSCI 152 Performance and Data Structures (489) (C- and above)                                                                       |                                                 |  | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |                                     |  |  |
| 343                                        | CSCI 399  | Internship II                                     | 3 | 6  |                                                                                                                                     |                                                 |  | Instructor's Permission Required. Registration through Add Course form only!                                                     |                                     |  |  |
| 344                                        | CSCI 399F | Internship II - F                                 | 6 | 12 |                                                                                                                                     |                                                 |  | Instructor's Permission Required. Registration through Add Course form only!                                                     |                                     |  |  |
| 345                                        | CSCI 408  | Senior Project I                                  | 3 | 6  |                                                                                                                                     |                                                 |  | 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SSH                                                                   |                                     |  |  |
| 346                                        | CSCI 434  | Information Security                              | 3 | 6  |                                                                                                                                     | CSCI 333 Computer Networks (1145) (D and above) |  | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |                                     |  |  |
| 347                                        | CSCI 437  | Internet of Things: Technologies and Applications | 3 | 6  | CSCI 333 Computer Networks (1145) (C- and above) AND ROBT 206 Microcontrollers with Lab (476) (C- and above)                        |                                                 |  | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |                                     |  |  |
| 348                                        | CSCI 494  | Deep Learning                                     | 3 | 6  | CSCI 390 Artificial Intelligence (643) (C and above) AND MATH 273 Linear Algebra with Applications (84) (C and above)               |                                                 |  | 3 year UG SEDS Computer Science, 4 year UG SEDS Computer Science, 5 year UG SEDS, 5 year UG SEDS Computer Science, 5 year UG SSH |                                     |  |  |
| <b>Electrical and Computer Engineering</b> |           |                                                   |   |    |                                                                                                                                     |                                                 |  |                                                                                                                                  |                                     |  |  |
| 349                                        | ELCE 200  | Introduction to Electrical Circuits               | 3 | 6  | MATH 162 Calculus II (170) (C- and above) AND PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) |                                                 |  | 2 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH                                                | Electrical and Computer Engineering |  |  |

|     |           |                                        |   |   |                                                                                                                                     |                                                               |  |                                                                                   |                                     |  |  |
|-----|-----------|----------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--|-----------------------------------------------------------------------------------|-------------------------------------|--|--|
| 350 | ELCE 203  | Signals and Systems                    | 3 | 6 | MATH 162 Calculus II (170) (C- and above) AND PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) |                                                               |  | 2 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 351 | ELCE 203L | Signals and Systems Laboratory         | 1 | 2 |                                                                                                                                     | ELCE 203 Signals and Systems (4993) (D and above)             |  | 2 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 352 | ELCE 204  | Solid State Devices                    | 3 | 6 | ENG 103 Engineering Materials II (4818) (C- and above)                                                                              | ELCE 204L Solid State Devices Laboratory (7769) (D and above) |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 353 | ELCE 205  | Discrete Mathematics                   | 3 | 6 | MATH 162 Calculus II (170) (C- and above)                                                                                           |                                                               |  | 2 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 354 | ELCE 301  | Electronic Circuits                    | 3 | 6 | ELCE 201 Circuit Theory (5507) (C- and above)                                                                                       |                                                               |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 355 | ELCE 301L | Electronic Circuits Laboratory         | 1 | 2 | ELCE 201L Circuit Theory Laboratory (6179) (C- and above)                                                                           | ELCE 301 Electronic Circuits (5918) (C- and above)            |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 356 | ELCE 304  | Computer Networks                      | 3 | 6 | ENG 101 Programming for Engineers (4517) (C- and above)                                                                             |                                                               |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 357 | ELCE 304L | Computer Networks Laboratory           | 1 | 2 |                                                                                                                                     | ELCE 304 Computer Networks (5920) (D and above)               |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 358 | ELCE 306  | Linear Control Theory                  | 3 | 6 | ELCE 203 Signals and Systems (4993) (C- and above)                                                                                  |                                                               |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 359 | ELCE 307  | Digital Signal Processing              | 3 | 6 | ELCE 203 Signals and Systems (4993) (C- and above)                                                                                  |                                                               |  | 3 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |
| 360 | ELCE 452  | Renewable Energy and Electric Vehicles | 3 | 6 | ELCE 200 Introduction to Electrical Circuits (4991) (C- and above)                                                                  |                                                               |  | 4 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH | Electrical and Computer Engineering |  |  |

|                                             |          |                                 |   |   |                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                     |                                                                                                                                                    |  |  |
|---------------------------------------------|----------|---------------------------------|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 361                                         | ELCE 455 | Machine Learning with Python    | 3 | 6 | ENG 101 Programming for Engineers (4517) (C- and above) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above)                                               |  |  | 4 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH                                                                                                                                                                                   | Electrical and Computer Engineering                                                                                                                |  |  |
| 362                                         | ELCE 457 | Introduction to Computer Vision | 3 | 6 | ENG 101 Programming for Engineers (4517) (C- and above) AND ENG 200 Engineering Mathematics III (Differential Equations and Linear Algebra) (5009) (C- and above)               |  |  | 4 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS, 5 year UG SSH                                                                                                                                                                                   | Electrical and Computer Engineering                                                                                                                |  |  |
| 363                                         | ELCE 461 | Industrial Automation           | 3 | 6 | ELCE 202 Digital Logic Design (4992) (C- and above)                                                                                                                             |  |  | 4 year UG SEDS Electrical and Computer Engineering                                                                                                                                                                                                                  |                                                                                                                                                    |  |  |
| 364                                         | ELCE 462 | Wireless Networks               | 3 | 6 | ENG 201 Applied Probability and Statistics (5505) (C- and above) AND (ELCE 308 Communication Systems (5922) (C- and above) OR ELCE 304 Computer Networks (5920) (C- and above)) |  |  | 4 year UG SEDS Electrical and Computer Engineering                                                                                                                                                                                                                  |                                                                                                                                                    |  |  |
| <b>Mechanical and Aerospace Engineering</b> |          |                                 |   |   |                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                                                     |                                                                                                                                                    |  |  |
| 365                                         | ENG 100  | Introduction to Engineering     | 3 | 6 |                                                                                                                                                                                 |  |  | 1 year UG SEDS Chemical and Materials Engineering, 1 year UG SEDS Civil and Environmental Engineering, 1 year UG SEDS Electrical and Computer Engineering, 1 year UG SEDS Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH, SMG, Undeclared SEDS | Chemical and Materials Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Mechanical and Aerospace Engineering |  |  |

|     |         |                                                                         |   |   |                                          |  |                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                |                                                                                                                                                         |  |  |
|-----|---------|-------------------------------------------------------------------------|---|---|------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 366 | ENG 101 | Programming for Engineers                                               | 3 | 6 |                                          |  | CSCI 151 Programming for Scientists and Engineers (192) (F) OR CSCI 111 Web Programming and Problem Solving (110) (F) OR CSCI 115 Programming Fundamentals (5257) (F) OR CSCI 152 Performance and Data Structures (489) (F) OR CSCI 408 Senior Project I (1481) (F) OR CSCI 409 Senior Project II (1483) (F) | 1 year UG SEDS Chemical and Materials Engineering, 1 year UG SEDS Civil and Environmental Engineering, 1 year UG SEDS Electrical and Computer Engineering, 1 year UG SEDS Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH, Undeclared SEDS | Chemical and Materials Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Mechanical and Aerospace Engineering      |  |  |
| 367 | ENG 200 | Engineering Mathematics III (Differential Equations and Linear Algebra) | 3 | 6 | MATH 162 Calculus II (170) (C and above) |  |                                                                                                                                                                                                                                                                                                              | 2 year UG SEDS Chemical and Materials Engineering, 2 year UG SEDS Civil and Environmental Engineering, 2 year UG SEDS Electrical and Computer Engineering, 2 year UG SEDS Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH                  | Chemical and Materials Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Mechanical and Aerospace Engineering, SMG |  |  |
| 368 | ENG 400 | Capstone Project                                                        | 3 | 6 |                                          |  |                                                                                                                                                                                                                                                                                                              | 4 year UG SEDS Chemical and Materials Engineering, 4 year UG SEDS Civil and Environmental Engineering, 4 year UG SEDS Electrical and Computer Engineering, 4 year UG SEDS Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH                  |                                                                                                                                                         |  |  |

|     |         |                               |   |   |                                                                                                                            |  |  |                                                                                                |                                            |  |  |
|-----|---------|-------------------------------|---|---|----------------------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------|--------------------------------------------|--|--|
| 369 | MAE 201 | Computer Aided Design         | 3 | 6 |                                                                                                                            |  |  | 2 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 370 | MAE 300 | Fluid Mechanics I             | 3 | 6 | PHYS 161 Physics I for<br>Scientists and Engineers<br>with Laboratory (116) (D<br>and above)                               |  |  | 3 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 371 | MAE 301 | Engineering<br>Thermodynamics | 3 | 6 |                                                                                                                            |  |  | 3 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 372 | MAE 302 | Machine Elements<br>Design    | 3 | 6 | MAE 205 Material and<br>Manufacturing I (5534) (D<br>and above)                                                            |  |  | 3 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 373 | MAE 303 | Control Systems               | 3 | 6 |                                                                                                                            |  |  | 3 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 374 | MAE 400 | Heat Transfer                 | 3 | 6 | MAE 300 Fluid Mechanics<br>I (5926) (D and above)<br>AND MAE 301<br>Engineering<br>Thermodynamics (5927)<br>(D and above)  |  |  | 4 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 375 | MAE 401 | Mechanical Systems<br>Design  | 3 | 6 | MAE 302 Machine<br>Elements Design (5928)<br>(D and above)                                                                 |  |  | 4 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 376 | MAE 450 | Additive Manufacturing        | 3 | 6 | MAE 205 Material and<br>Manufacturing I (5534) (D<br>and above)                                                            |  |  | 4 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |
| 377 | MAE 453 | Fire Engineering              | 3 | 6 | MAE 305 Fluid Mechanics<br>II (6173) (D and above)<br>AND MAE 301<br>Engineering<br>Thermodynamics (5927)<br>(D and above) |  |  | 4 year UG SEDS<br>Mechanical and<br>Aerospace Engineering, 5<br>year UG SEDS, 5 year UG<br>SSH | Mechanical and<br>Aerospace<br>Engineering |  |  |

|                                  |          |                                               |   |   |                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                       |                                                                                                         |  |  |
|----------------------------------|----------|-----------------------------------------------|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--|--|
| 378                              | MAE 454  | Aerodynamics                                  | 3 | 6 | MAE 300 Fluid Mechanics I (5926) (D and above)                                                                                                                                                                                                                                                                                                                    |  |  | 4 year UG SEDS<br>Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH | Mechanical and Aerospace Engineering                                                                    |  |  |
| 379                              | MAE 462  | Multiphase Systems                            | 3 | 6 | MAE 300 Fluid Mechanics I (5926) (D and above) AND MAE 305 Fluid Mechanics II (6173) (D and above)                                                                                                                                                                                                                                                                |  |  | 4 year UG SEDS<br>Mechanical and Aerospace Engineering, 5 year UG SEDS, 5 year UG SSH | Mechanical and Aerospace Engineering                                                                    |  |  |
| <b>Robotics and Mechatronics</b> |          |                                               |   |   |                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                       |                                                                                                         |  |  |
| 380                              | ROBT 201 | Mechanics: Statics and Dynamics               | 3 | 6 | MATH 162 Calculus II (170) (C- and above) AND (PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C- and above) OR PHYS 171 Physics I for Physics Majors with Laboratory (1401) (C- and above))                                                                                                                                               |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics, SMG   | Biological Sciences, Chemistry, Computer Science, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |
| 381                              | ROBT 203 | Electrical and Electronic Circuits I with Lab | 4 | 8 | MATH 162 Calculus II (170) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above) OR (PHYS 141 Physics I for non-majors with Lab (1437) (C- and above) AND PHYS 142 Physics II for non-majors with Lab (1438) (C- and above))) |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics        | Biological Sciences, Chemistry, Computer Science, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |
| 382                              | ROBT 205 | Signals and Sensing with Lab                  | 4 | 8 | MATH 162 Calculus II (170) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above))                                                                                                                                             |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics        | Biological Sciences, Chemistry, Computer Science, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |
| 383                              | ROBT 301 | Mechanical Design I with CAD Laboratory       | 4 | 8 | ROBT 201 Mechanics: Statics and Dynamics (475) (C- and above)                                                                                                                                                                                                                                                                                                     |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics        | Biological Sciences, Chemistry, Computer Science, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |



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|-----|----------|-------------------------------------------------------------|---|---|------------------------------------------------------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 384 | ROBT 303 | Linear Control Theory with Lab                              | 4 | 8 | ROBT 202 System Dynamics and Modeling (68) (C- and above) AND MATH 274 Introduction to Differential Equations (484) (C- and above) |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Biological Sciences, Chemistry, Computer Science, Mathematics, Physics, Undeclared SEDS, Undeclared SSH                                      |  |  |
| 385 | ROBT 305 | Embedded Systems                                            | 3 | 6 | ROBT 206 Microcontrollers with Lab (476) (C- and above)                                                                            |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Undeclared SEDS, Undeclared SSH                                 |  |  |
| 386 | ROBT 308 | Industrial Automation                                       | 3 | 6 |                                                                                                                                    |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Biological Sciences, Chemistry, Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |
| 387 | ROBT 310 | Image Processing                                            | 3 | 6 | MATH 162 Calculus II (170) (C- and above) AND MATH 273 Linear Algebra with Applications (84) (C- and above)                        |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Biological Sciences, Chemistry, Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |
| 388 | ROBT 403 | Robotics II: Control, Modeling and Learning with Laboratory | 4 | 8 | ROBT 303 Linear Control Theory with Lab (623) (C and above) AND ROBT 312 Robotics I: Kinematics and Dynamics (5263) (C and above)  |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Biological Sciences, Chemistry, Computer Science, Mathematics, Physics, Undeclared SEDS, Undeclared SSH                                      |  |  |

|     |          |                                          |   |   |                                                                                                                                                                            |  |  |                                                                                |                                                                                                                                              |  |  |
|-----|----------|------------------------------------------|---|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 389 | ROBT 407 | Statistical Methods and Machine Learning | 3 | 6 | MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 321 Probability (482) (C and above) AND CSCI 152 Performance and Data Structures (489) (C and above) |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Biological Sciences, Chemistry, Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |
| 390 | ROBT 414 | Human-Robot Interaction                  | 3 | 6 | CSCI 152 Performance and Data Structures (489) (C- and above)                                                                                                              |  |  | 5 year UG SEDS, 5 year UG SSH, Robotics Engineering, Robotics and Mechatronics | Biological Sciences, Chemistry, Computer Science, Electrical and Computer Engineering, Mathematics, Physics, Undeclared SEDS, Undeclared SSH |  |  |