

## Spring 2023 ECE Course Schedule

| Class #         | Title   | Max Seats | Credits | Day-Times                               | Instructor(s)         | Status            |
|-----------------|---|-----------|---------|---|-----------------------|-------------------|
| EN.520.123 (01) | Computational Modeling for ECE  | 19        | 3       | MW 3:00PM - 4:15PM, T 3:00PM - 4:15PM   | N. Dehak              | Open              |
| EN.520.123 (02) | Computational Modeling for ECE  | 19        | 3       | MW 3:00PM - 4:15PM, T 3:00PM - 4:15PM   | N. Dehak              | Open              |
| EN.520.123 (03) | Computational Modeling for ECE  | 12        | 3       | MW 3:00PM - 4:15PM, T 3:00PM - 4:15PM   | N. Dehak              | Open              |
| EN.520.142 (01) | Digital Systems Fundamentals  | 48        | 3       | MWF 11:00AM - 11:50AM                   | L. Buccafusca         | Open              |
| EN.520.150 (01) | Light, Image and Vision   | 19        | 3       | TTh 10:30AM - 11:45AM                   | J. Kang               | Open              |
| EN.520.151 (01) | ECE Ideation and Design Lab (First Year)                                  | 4         | 1       | Th 4:30PM - 5:20PM                      | A. Andreou            | Approval Required |
| EN.520.214 (01) | Signals & Systems   | 25        | 4       | TTh 1:30PM - 2:45PM, M 3:00PM - 4:00PM  | M. Elhilali           | Open              |
| EN.520.214 (02) | Signals & Systems   | 25        | 4       | TTh 1:30PM - 2:45PM, T 5:00PM - 6:00PM  | M. Elhilali           | Open              |
| EN.520.214 (03) | Signals & Systems   | 25        | 4       | TTh 1:30PM - 2:45PM, W 4:30PM - 5:30PM  | M. Elhilali           | Open              |
| EN.520.216 (01) | Introduction To VLSI  | 30        | 3       | TTh 3:00PM - 4:15PM                     | R. Etienne Cummings   | Open              |
| EN.520.220 (01) | Electromagnetic Waves   | 28        | 3       | MW 12:00PM - 1:15PM                     | M. Foster             | Open              |
| EN.520.232 (01) | Mastering Electronics II  | 60        | 3       | MWF 10:00AM - 10:50AM                   | A. Foster             | Open              |
| EN.520.233 (01) | Mastering Electronics II Lab  | 60        | 2       | F 1:00PM - 4:00PM                       | L. Buccafusca         | Open              |
| EN.520.241 (01) | Introduction to Mechatronics: Sensing, Processing, Learning and Actuation | 19        | 3       | T 9:00AM - 11:45AM                      | E. Mallada Garcia     | Open              |
| EN.520.251 (01) | ECE Ideation and Design Lab   | 4         | 1       | Th 4:30PM - 5:20PM                      | A. Andreou            | Approval Required |
| EN.520.302 (01) | Internet of Things Project Lab  | 19        | 3       | Th 9:00AM - 10:20AM, Th 1:30PM - 4:00PM | R. Glaser             | Open              |
| EN.520.353 (01) | Control Systems   | 35        | 4       | MW 1:30PM - 2:45PM, F 1:30PM - 2:45PM   | M. Fazlyab            | Open              |
| EN.520.363 (01) | ECE Ideation and Design Lab   | 4         | 3       | Th 4:30PM - 5:20PM                      | A. Andreou            | Approval Required |
| EN.520.405 (01) | Advanced Optical and Optoelectronic Instruments and Devices               | 10        | 3       | MW 3:00PM - 4:15PM                      | J. Khurgin            | Open              |
| EN.520.407 (01) | Introduction to the Physics of Electronic Devices                         | 10        | 3       | MW 1:30PM - 2:45PM                      | J. Khurgin            | Open              |
| EN.520.415 (01) | Image Process & Analysis II   | 10        | 3       | MW 4:30PM - 5:45PM                      | J. Goutsias           | Open              |
| EN.520.417 (01) | Computation for Engineers   | 10        | 3       | TTh 1:30PM - 2:45PM                     | H. Weinert            | Open              |
| EN.520.433 (01) | Medical Image Analysis  | 19        | 3       | WF 12:00PM - 1:15PM                     | J. Prince             | Open              |
| EN.520.438 (01) | Deep Learning   | 5         | 3       | TTh 9:00AM - 10:15AM                    | V. Patel              | Open              |
| EN.520.439 (01) | Machine Learning for Medical Applications                                 | 10        | 3       | MWF 9:00AM - 9:50AM                     | L. Moro Velazquez     | Open              |
| EN.520.440 (01) | Machine Intelligence on Embedded Systems                                  | 10        | 3       | T 1:30PM - 4:15PM                       | A. Andreou, D. Mendat | Approval Required |
| EN.520.448 (01) | Electronics Design Lab  | 12        | 3       | W 4:30PM - 5:30PM, F 1:30PM - 4:20PM    | A. Andreou            | Open              |
| EN.520.448 (02) | Electronics Design Lab  | 12        | 3       | W 4:30PM - 5:30PM, F 1:30PM - 4:20PM    | A. Andreou            | Open              |
| EN.520.450 (01) | Advanced Micro-Processor Lab  | 20        | 3       | Th 8:00AM - 8:50AM, Th 10:30AM - 1:20PM | R. Glaser             | Open              |
| EN.520.450 (02) | Advanced Micro-Processor Lab  | 20        | 3       | Th 8:00AM - 8:50AM, Th 1:30PM - 4:20PM  | R. Glaser             | Open              |

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|-----------------|---|-----------|---------|--------------------------------------|-----------------------|-------------------|
| EN.520.463 (01) | ECE Ideation and Design Lab                                 | 4         | 3       | Th 4:30PM - 5:20PM                   | A. Andreou            | Approval Required |
| EN.520.483 (01) | Bio-Photonics Laboratory                                    | 10        | 3       | T 1:30PM - 4:50PM                    | J. Kang               | Open              |
| EN.520.492 (01) | Mixed-Mode VLSI Systems                                     | 5         | 3       |                                      | P. Pouliquen          | Open              |
| EN.520.497 (01) | Data Communications and Networking                          | 10        | 3       | T 5:00PM - 7:50PM                    | A. Dutta              | Open              |
| EN.520.571 (01) | Speech Technologies Reading Group                           | 5         | 1       | F 10:00AM - 11:00AM                  | L. Garcia Perera      | Approval Required |
| EN.520.605 (01) | Advanced Optical and Optoelectronic Instruments and Devices | 19        | 3       | MW 3:00PM - 4:15PM                   | J. Khurgin            | Open              |
| EN.520.607 (01) | Introduction to the Physics of Electronic Devices           | 19        | 3       | MW 1:30PM - 2:45PM                   | J. Khurgin            | Open              |
| EN.520.615 (01) | Image Processing & Analysis II                              | 30        | 3       | MW 4:30PM - 5:45PM                   | J. Goutsias           | Open              |
| EN.520.617 (01) | Computation for Engineers                                   | 20        | 3       | TTh 1:30PM - 2:45PM                  | H. Weinert            | Open              |
| EN.520.621 (01) | Introduction To Nonlinear Systems                           | 29        | 3       | MW 1:30PM - 2:45PM                   | P. Iglesias           | Open              |
| EN.520.623 (01) | Medical Image Analysis                                      | 50        | 3       | WF 12:00PM - 1:15PM                  | J. Prince             | Open              |
| EN.520.627 (01) | Photovoltaics and Energy Devices                            | 30        | 3       | TTh 9:00AM - 10:15AM                 | S. Thon               | Open              |
| EN.520.631 (01) | Ultrasound and Photoacoustic Beamforming                    | 25        | 3       | TTh 10:30AM - 11:45AM                | M. Bell               | Open              |
| EN.520.638 (01) | Deep Learning   | 70        | 3       | TTh 9:00AM - 10:15AM                 | V. Patel              | Open              |
| EN.520.640 (01) | Machine Intelligence on Embedded Systems                    | 30        | 3       | T 1:30PM - 4:15PM                    | A. Andreou, D. Mendat | Approval Required |
| EN.520.648 (01) | Compressed Sensing and Sparse Recovery                      | 40        | 3       | TTh 1:30PM - 2:45PM                  | T. Tran               | Open              |
| EN.520.650 (01) | Machine Intelligence  | 40        | 3       | MW 12:00PM - 1:15PM                  | R. Chellappa          | Open              |
| EN.520.656 (01) | Data Smoothing Using Machine Learning                       | 20        | 3       | TTh 10:30AM - 11:45AM                | H. Weinert            | Open              |
| EN.520.659 (01) | Machine learning for medical applications                   | 24        | 3       | MWF 9:00AM - 9:50AM                  | L. Moro Velazquez     | Open              |
| EN.520.659 (02) | Machine learning for medical applications                   | 24        | 3       | MWF 9:00AM - 9:50AM                  | L. Moro Velazquez     | Open              |
| EN.520.663 (01) | ECE Ideation and Design Lab                                 | 4         | 3       | Th 4:30PM - 5:20PM                   | A. Andreou            | Approval Required |
| EN.520.666 (01) | Information Extraction                                      | 50        | 3       | TTh 4:30PM - 5:45PM                  | S. Khudanpur          | Open              |
| EN.520.683 (01) | Bio-Photonics Laboratory                                    | 15        | 3       | T 1:30PM - 4:50PM                    | J. Kang               | Open              |
| EN.520.692 (01) | Mixed-Mode VLSI Systems                                     | 10        | 3       | TBD                                  | P. Pouliquen          | Approval Required |
| EN.520.697 (01) | Data Communications and Networking                          | 20        | 3       | T 5:00PM - 7:50PM                    | A. Dutta              | Open              |
| EN.520.698 (01) | Networks Meet Machine Learning: Methods and Applications    | 40        | 3       | MW 1:30PM - 2:45PM                   | Y. Dvorkin            | Reserved<br>Open  |
| EN.520.738 (01) | Advanced Electronic Lab Design                              | 10        | 3       | W 4:30PM - 5:30PM, F 1:30PM - 4:20PM | A. Andreou            | Open              |
| EN.520.738 (02) | Advanced Electronic Lab Design                              | 10        | 3       | W 4:30PM - 5:30PM, F 1:30PM - 4:20PM | A. Andreou            | Open              |
| EN.520.807 (01) | Current Topics in Language and Speech Processing            | 80        | 1       | MF 12:00PM - 1:15PM                  | S. Khudanpur          | Open              |
| EN.520.871 (01) | Speech Technologies Reading Group                           | 12        | 1       | F 10:00AM - 11:00AM                  | L. Garcia Perera      | Open              |

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|-----------------|---|-----------|---------|--------------------|----------------------------|--------|
| EN.520.895 (01) | Electrical & Computer Engineering Seminar     | 90        | 1       | Th 3:00PM - 4:15PM | M. Foster                  | Open   |
| EN.580.678 (01) | Biomedical Photonics I                        | 10        | 4       | F 1:30PM - 4:15PM  | X. Li                      | Open   |
| EN.580.788 (01) | Biomedical Photonics II                       | 10        | 4       | F 1:30PM - 4:50PM  | X. Li                      | Open   |
| EN.601.856 (01) | Seminar: Medical Image Analysis               | 24        | 1       | T 3:00PM - 4:15PM  | J. Prince, R. Taylor       | Open   |
| EN.620.745 (01) | Seminar in Computational Sensing and Robotics | 90        | 1       | W 12:00PM - 1:20PM | P. Kazanzides, L. Whitcomb | Open   |
| EN.620.745 (02) | Seminar in Computational Sensing and Robotics | 130       | 1       | W 12:00PM - 1:20PM | P. Kazanzides, L. Whitcomb | Open   |

### Crosslisted Courses

| Class #         | Title                                  | Max Seats | Credits | Day-Times                            | Instructor(s)                 | Status |
|-----------------|--|-----------|---------|--------------------------------------|-------------------------------|--------|
| EN.500.113 (01) | Gateway Computing: Python              | 19        | 3       | MWF 8:00AM - 8:50AM                  | Staff                         | Open   |
| EN.500.113 (02) | Gateway Computing: Python              | 19        | 3       | MWF 9:00AM - 9:50AM                  | Staff                         | Open   |
| EN.500.113 (03) | Gateway Computing: Python              | 19        | 3       | MWF 10:00AM - 10:50AM                | Staff                         | Open   |
| EN.500.113 (04) | Gateway Computing: Python              | 19        | 3       | MWF 11:00AM - 11:50AM                | Staff                         | Open   |
| EN.500.113 (05) | Gateway Computing: Python              | 19        | 3       | MWF 12:00PM - 12:50PM                | Staff                         | Open   |
| EN.500.113 (06) | Gateway Computing: Python              | 19        | 3       | MWF 1:00PM - 1:50PM                  | Staff                         | Open   |
| EN.500.113 (07) | Gateway Computing: Python              | 19        | 3       | MWF 2:00PM - 2:50PM                  | Staff                         | Open   |
| EN.500.113 (08) | Gateway Computing: Python              | 19        | 3       | MWF 3:00PM - 3:50PM                  | Staff                         | Open   |
| EN.500.113 (09) | Gateway Computing: Python              | 19        | 3       | MWF 4:00PM - 4:50PM                  | Staff                         | Open   |
| EN.500.113 (10) | Gateway Computing: Python              | 19        | 3       | MWF 5:00PM - 5:50PM                  | Staff                         | Open   |
| EN.500.132 (01) | Bootcamp: Java                         | 19        | 1       | Online                               | Staff                         | Open   |
| EN.530.421 (01) | Mechatronics                           | 12        | 3       | M 9:00AM - 9:50AM, M 1:30PM - 4:20PM | J. Brown                      | Open   |
| EN.530.421 (02) | Mechatronics                           | 12        | 3       | M 9:00AM - 9:50AM, T 1:30PM - 4:20PM | J. Brown                      | Open   |
| EN.530.421 (03) | Mechatronics                           | 12        | 3       | M 9:00AM - 9:50AM, W 1:30PM - 4:20PM | J. Brown                      | Open   |
| EN.660.346 (01) | Multidisciplinary Engineering Design 2 | 30        | 3       | W 6:00PM - 8:00PM                    | N. Abu-Mulaweh, A. Burkholder | Open   |
| EN.660.346 (02) | Multidisciplinary Engineering Design 2 | 30        | 3       | W 6:00PM - 8:00PM                    | A. Burkholder Murphy          | Open   |
| EN.660.346 (03) | Multidisciplinary Engineering Design 2 | 30        | 3       | W 6:00PM - 8:00PM                    | A. Burkholder Murphy          | Open   |
| EN.660.346 (04) | Multidisciplinary Engineering Design 2 | 30        | 3       | W 6:00PM - 8:00PM                    | A. Burkholder Murphy          | Open   |
| EN.660.346 (05) | Multidisciplinary Engineering Design 2 | 30        | 3       | W 6:00PM - 8:00PM                    | A. Burkholder Murphy          | Open   |
| EN.660.346 (06) | Multidisciplinary Engineering Design 2 | 30        | 3       | W 6:00PM - 8:00PM                    | A. Burkholder Murphy          | Open   |