

# Master of Science Program Planning Sheet

## Electrical and Computer Engineering

Department of Electrical and Computer Engineering



**MATRICULATION YEAR FALL 2021**

Student's Name (In Print): \_\_\_\_\_ BU ID \_\_\_\_\_

Advisor Name (in Print): \_\_\_\_\_

Students are required to earn a total of 32 credits (8 courses) at the graduate level (500-level and above) with grades of C or better in order to graduate. Students must achieve a degree GPA  $\geq 3.0$  for the 32 credits used toward the degree. If cumulative GPA drops below 3.0, the student will be put on academic probation.

### **PROGRAM REQUIREMENTS**

#### **1. SOFTWARE REQUIREMENT (4 credits)**

- ☐ EC602: Design by Software in ECE\* **See note below**  
☐ Check if exempt from EC602: Design by Software in ECE.

Department confirmation of exemption: \_\_\_\_\_

Students exempted from EC602 must replace it with an ECE graduate-level course (EC500-level or above).

List the course number and title here: \_\_\_\_\_

#### **2. PRACTICUM REQUIREMENT (4 credits) – Please select one: EC601: Product**

- ☐ EC601: Product Design in ECE\* **See note below**  
☐ Check if exempt from EC601: Product Design in ECE.

Department confirmation of exemption: \_\_\_\_\_

Students who place out of EC601 must then select one of the following below:

- ☐ EC953: MS Project  
☐ EC954: MS Thesis

#### **3. ECE GRADUATE ELECTIVES (16 credits) – Please list your 16 credits (4 courses) from ECE graduate courses at the 500-level or above (*excluding* EC601 and EC602). **Include course numbers and complete course titles.****

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#### **4. GENERAL ELECTIVES (8 credits) – Students must take 8 credits (2 courses) of general graduate electives (not counted for their ECE electives). General graduate electives include College of Engineering graduate-level courses *except* courses utilized to meet other requirements. Graduate courses outside the college must be approved by the department MS committee; those listed on the back of this sheet have already been pre-approved (*excluding* EC601 and EC602). Petitions are required for seeking approvals for courses that are not pre-approved. **Petitions must be submitted in the semester of the course enrollment by the petition deadline (first Thursday of a semester). No petition is accepted for committee review after the deadline. Include course numbers and complete course titles.****

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Student Signature \_\_\_\_\_ Advisor's Signature \_\_\_\_\_

Departmental Signature \_\_\_\_\_

**\*Note:** In order to waive or be exempt from this requirement, students must pass a placement exam typically given at the beginning of the academic year.

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### Electives

(See the [College of Engineering Bulletin](#) for course descriptions)

The following subdivisions are provided-for informational purposes only-to guide you in choosing electives according to your interests.

#### **Bio-ECE and Digital Health**

EC505 EC516 EC520 EC555 EC571 EC580 EC582 EC716 EC717 EC720 EC772 EC782 EC765 CS585 MA665  
MA666 BE771

#### **Computational and Cyberphysical Systems**

EC501 EC504 EC524 EC535 EC541 EC544 EC605 EC701 EC724 ME740 ME570

#### **Computer Communications and Networks**

EC505 EC508 EC515 EC521 EC524 EC534 EC541 EC544 EC561 EC715 EC724 EC725 EC727 EC733 EC741  
EC744 EC749

#### **Cybersecurity**

EC503 EC504 EC521 EC535 EC541 EC544 CS542 CS548 CS552 CS558 CS568 CS640

#### **Data Science and Intelligent Systems**

EK500 EC503 EC504 EC505 EC517 EC524 EC528 EC541 EC544 EC719 EC724 EC733 CS505 CS506 CS542  
CS523 CS530 CS640

#### **Hardware**

EC513 EC527 EC535 EC551 EC561 EC571 EC580 EC582 EC605 EC713 EC749 EC752 EC753 EC757 EC772  
EC782

#### **Imaging and Optical Science**

EC520 EC555 EC562 EC565 EC568 EC570 EC577 EC762 EC763 EC777 CS585

#### **Mobile and Cloud Computing**

EC504 EC521 EC528 EC535 EC541 EC544 EC605 CS538 CS548 CS558 CS568 CS651

#### **Photonics, Electronics, and Nanotechnology**

EC500 L6 EC555 EC562 EC563 EC565 EC566 EC568 EC569 EC570 EC573 EC579 EC591 EC707 EC731 EC760  
EC762 EC763 EC764 EC765 EC770 EC773 EC777

#### **Sensing and Information**

EC503 EC504 EC505 EC508 EC515 EC516 EC517 EC520 EC521 EC702 EC715 EC716 EC717, EC719, EC720  
CS542 CS585 CS640

#### **Signal Processing and Communications**

EC503 EC505 EC508 EC515 EC516 EC517 EC519 EC520 EC541 EC702 EC715 EC716 EC717 EC719 EC720  
CS542 CS585 CS640

#### **Solid-State Circuits, Devices, and Materials**

EC571 EC574 EC575 EC577 EC578 EC579 EC580 EC582 EC770 EC771 EC772 EC774 EC775 EC777 EC782  
ME506

#### **Software**

EC504 EC511 EC512 EC521 EC527 EC528 EC535 EC544 EC605 EC712 EC730 CS530 CS561 CS630 CS640

#### **Systems and Control**

EC501 EC505 EC517 EC524 EC701 EC702 EC710 EC724 EC732 EC733 CS506 CS542 CS562 CS565 CS660  
MA 541/542 MA721 MA751 BE562 BE572 BE575 ME570 ME740