

## CURRICULAR REQUIREMENTS

Approved December 15, 1995

Last amended July 16, 2008 (effective September 1, 2008)

1. **Credit requirement:** at least 32 credits.
  - a. Thesis students are required to take at least 20 credits of structured coursework (500 or 700 level courses) while non-thesis students are required to take at least 24 credits of structured coursework.
  - b. All credits towards the MS should be 500 level or higher.
2. **Distribution requirements:**
  - a. Concentration: 16 credits; may include 8 EC900-level credits.
  - b. Breadth: Any 2 ECE courses not under the chosen concentration. Courses listed under multiple *Concentrations* may be counted as *Concentration* or *Breadth* but **not both**.
  - c. Advanced Technical Electives: 2 EC700-level non-project courses (EC712, EC757, EC772); may be counted as *Concentration* or *Breadth*. At least one *Advanced Technical Elective* must be in your *Concentration* area.
  - d. Thesis or Project: At least 4 credits of EC901, EC910, EC911, EC912, EC913, EC914, EC915, EC566, EC712, EC757, or EC772; 700-level project courses may be counted as a *Concentration* course but not as an *Advanced Technical Elective*.
  - e. Other electives: Remaining credits may be fulfilled by any ENG graduate course or, by petition, any other BU graduate course approved as being applicable to the degree by the student's advisor.
  - f. Restrictions: Neither teaching seminar courses (xx850) nor review/refresher courses (MN566) satisfy curricular requirements.
3. **Grade requirements:**
  - a. Cumulative GPA  $\geq 3.000$ .
  - b. Only grades of C or better fulfill curricular requirements.
4. **Special Topics Courses:**
  - a. Special Topics courses (EC500 and EC700) may fill a requirement. To find out what Concentration(s) a Special Topics course is listed under, please consult your advisor or the Academic Programs Manager.

## CONCENTRATION LISTINGS (ALL EC COURSES UNLESS OTHERWISE NOTED)

Electrical Engineering

- **Signal Processing and Communications**  
505 515 516 517 520 702 715 716 717 719 720
- **Systems and Control**  
501 505 517 524 701 702 710 724 ME/SE 740 ME/SE 755 ME/SE 762
- **Solid State Circuits, Devices, and Materials**  
571 574 575 578 579 580 582 770 771 772 774 775 777
- **Electromagnetics and Photonics**  
560 563 566 568 569 570 591 707 731 760 762 763 764 765 770 773 777

Computer Systems Engineering

- **Software**  
504 511 512 518 535 544 712 726 730
- **Hardware/Architecture**  
513 535 551 561 571 580 582 713 749 751 752 753 757 772
- **Computer Communications/Networks**  
505 515 524 534 541 544 561 715 724 725 727 733 744 749 755 761

Photonics - EC560 may not be taken for *Breadth* by Photonics Majors

- **Lasers and Applications**  
560 569 570 591 760 762 763 764 765 773
- **Fiber Optics and Optical Communications**  
560 563 568 591 760 770
- **Photonic Materials and Devices**  
560 574 575 591 760 771 774 777

The Master of Science  
In  
Electrical/Computer Systems/Photonics

**PROGRAM PLANNING SHEET**

NAME: \_\_\_\_\_ E-MAIL: \_\_\_\_\_

BU ID#: \_\_\_\_\_ ADVISOR: \_\_\_\_\_

DEGREE (circle one): Electrical      Computer Systems      Photonics

COURSE	COURSE NAME	CREDITS	SEM/YR	GRADE
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1. CONCENTRATION AREA – 16 credits

Area: \_\_\_\_\_

(a)	_____	4 cr.	_____	_____
(b)	_____	4 cr.	_____	_____
(c)	_____	4 cr.	_____	_____
(d)	_____	4 cr.	_____	_____

2. BREADTH REQUIREMENT – Indicate which of your courses fulfill breadth:

_____	_____	4 cr.	_____	_____
_____	_____	4 cr.	_____	_____

3. ADVANCED TECHNICAL ELECTIVES – 8 credits

EC700 level or above; 700-level project courses (EC712, EC757, EC772) do not count.

_____	_____	4 cr.	_____	_____
_____	_____	4 cr.	_____	_____

4. PROJECT REQUIREMENT – 4 credits

Course #: \_\_\_\_\_

Instructor: \_\_\_\_\_

Title of Thesis/Project: \_\_\_\_\_

5. GRADUATE TECHNICAL ELECTIVES – Remaining Credits

_____	_____	4 cr.	_____	_____
_____	_____	4 cr.	_____	_____
_____	_____	4 cr.	_____	_____

6. TOTAL CREDITS \_\_\_\_\_ (32 required; "C" or better, 500 level or higher)

7. CUMULATIVE GPA \_\_\_\_\_ (Include ALL graduate courses; must be  $\geq$  3.000)

8. ACADEMIC ADVISOR SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_