

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 ≥ 3.000)

8. ACADEMIC ADVISOR SIGNATURE: _____ **DATE:** _____

THE MASTER OF SCIENCE IN:**ELECTRICAL ENGINEERING
COMPUTER SYSTEMS ENGINEERING
PHOTONICS****CURRICULAR REQUIREMENTS**

Approved December 15, 1995

Last amended August 12, 2009 (effective September 1, 2009)

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 (ME566) satisfy curricular requirements.
3. **Grade requirements:**
 - a. Cumulative GPA ≥ 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 SE/EC 734 ME/SE 740 ME/SE 755 ME/SE 762
- **Solid State Circuits, Devices, and Materials**
571 574 575 577 578 579 580 582 770 771 772 774 775 777 782
- **Electromagnetics and Photonics**
560 563 566 568 569 570 591 707 731 760 762 763 764 765 770 773 777
- **Bioelectrical** – must take at least 2 EC and at least 2 BE courses
EC: 505 516 520 571 580 582 716 717 720 772 782 EC/BE: 740 765 BE: 511 512 515 516 540 747

Computer Systems Engineering

- **Software**
504 511 512 518 535 544 712 726 728 730
- **Hardware/Architecture**
513 535 551 561 571 580 582 713 749 751 752 753 757 772 782
- **Computer Communications/Networks**
505 515 524 534 541 544 561 715 724 725 727 733 741 744 749

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