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

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<th>COURSE</th>
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<th>CREDITS</th>
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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:

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<th>COMPUTER SYSTEMS ENGINEERING</th>
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### 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 \( \geq 3.00 \).  
   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
- **Biomedical — must take at least 2 EC and at least 2 DE courses**
  - EC: 505 515 520 571 580 582 716 717 720 772 782  
  - DE: 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**  
  505 515 524 534 544 561 715 724 725 727 733 741 744 749

#### Photonics

- **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