Boston University College of Engineering
Department of Electrical and Computer Engineering
MEng Computer Engineering Program Planning Sheet

Student Name: _____ Email: _____
Academic Advisor: _____ BU ID: _____
Advisor Signature: _____ Date: _____

Master of Engineering in Computer Engineering (MEng CE) students must take 32 credits (500-level or above). The specific coursework requirements for the MEng CE degree are as follows: At least 24 credits must be structured coursework in ECE; 16 credits (4 courses) must be taken in one of the ECE concentration areas listed below. In addition, students also need to satisfy the advanced technical course requirement by taking at least two 700-level ECE courses. Students may take 4 credits of 900-level coursework (project, research, or directed study); 900-level credit may count towards the concentration requirement but *not* as an advanced technical elective. The remainder of the 32-credit requirement may be met through graduate technical electives, which include all courses at the 500-level or above in ENG, as well as courses in the following CAS departments: astronomy, biology, chemistry, cognitive and neural systems, computer science, mathematics, and physics (CAS courses require advisor approval and an approved petition). **Note: Students are encouraged to explore graduate technical electives that embrace technical project management, entrepreneurship, or leadership development; some of these courses include: ENG EC 518 Project Management for Software-Intensive Systems, ENG EK 730 Technology Commercialization, ENG ME 502 Intellectual Assets: Creation, Protection, and Commercialization, ENG ME 525 Technology Ventures, GSM SI 851 Entrepreneurship, GSM SI 852 Starting New Ventures, GSM SPI 853 Entrepreneurial Management.**

MEng CE students must maintain a cumulative GPA of 3.00 to remain in good academic standing. All graduate courses taken are calculated into the student's GPA. Grades of "C–" or lower are not acceptable for the MEng CE degree. Up to 8 credits of coursework may be transferred from other approved graduate schools.

Program Form

	Course: _____	Sem/Year: _____	Grade: _____
Concentration Area Courses (Select four courses from one of the concentration areas below)	Course: _____	Sem/Year: _____	Grade: _____
	Course: _____	Sem/Year: _____	Grade: _____
	Course: _____	Sem/Year: _____	Grade: _____
Advanced Technical Electives (700-level)	Course: _____	Sem/Year: _____	Grade: _____
	Course: _____	Sem/Year: _____	Grade: _____
Graduate Technical Electives	Course: _____	Sem/Year: _____	Grade: _____
	Course: _____	Sem/Year: _____	Grade: _____
	Course: _____	Sem/Year: _____	Grade: _____
	Course: _____	Sem/Year: _____	Grade: _____

Concentrations

Embedded Systems and Robotics
ENG EC 504 Advanced Data Structures
ENG EC 511 Software Systems Design
ENG EC 512 Enterp. Client-Server Softw. Sys. Design
ENG EC 535 Introduction to Embedded Systems
ENG EC 544 Networking the Physical World
ENG EC 551 Adv. Digital Design with Verilog and FPGA
ENG EC 712 Adv. Software for Computer Engineers
ENG EC 728 Design/Test. of Dist. Softw.-Intensive Syst.
ENG EC 757 Advanced Microprocessor Design
ENG ME 570 Robot Motion Planning
ENG ME 719 Computational Problem Solving
ENG SE 734 Hybrid Systems
ENG SE 740 Vision, Robotics, and Planning

Chip and Computer Design and Architecture
ENG EC 513 Computer Architecture
ENG EC 551 Adv. Digital Design with Verilog and FPGA
ENG EC 571 VLSI Principles and Applications
ENG EC 580 Modern Active Circuit Design
ENG EC 582 RF/Analog IC Design Fundamentals
ENG EC 713 Parallel Computer Architecture
ENG EC 751 Design of Asynch. Circuit and Systems
ENG EC 752 Theory of Computer Hardware Testing
ENG EC 772 VLSI Graduate Design Project
ENG EC 782 RF/Analog IC Design
ENG EC 772 VLSI Graduate Design Project

Instrumentation and Circuits
ENG EC 535 Introduction to Embedded Systems
ENG EC 571 VLSI Principles and Applications

Boston University College of Engineering
Department of Electrical and Computer Engineering
MEng Computer Engineering Program Planning Sheet

ENG EC 575 Semiconductor Devices
ENG EC 580 Modern Active Circuit Design
ENG EC 582 RF/Analog IC Design Fundamentals
ENG EC 751 Design of Asynch. Circuit and Systems
ENG EC 757 Advanced Microprocessor Design

Reliable and Secure Computing and Communications
ENG EC 504 Advanced Data Structures
ENG EC 534 Stochastic
ENG EC 535 Introduction to Embedded Systems
ENG EC 541 Computer Communication Networks
ENG EC 561 Error-Control Codes
ENG EC 727 Advanced Coding
ENG EC 730 Information-Theoretic Design of Algorithms
ENG EC 752 Theory of Computer Hardware Testing
ENG EC 753 Fault-Tolerant Computing
ENG EC 761 Information Theory and Coding

Networking and Communications
ENG EC 505 Stochastic Processes
ENG EC 515 Digital Communication
ENG EC 517 Introduction to Information Theory
ENG EC 518 Software Project Management
ENG EC 541 Computer Communication Networks
ENG EC 544 Networking the Physical World
ENG EC 561 Error-Control Codes
ENG EC 715 Wireless Communications
ENG SE 741 Randomized Network Algorithms
ENG EC 700 Game Theory for Communications
ENG EC 724 Advanced Optimization and Methods
ENG EC 725 Queuing Systems
ENG EC 727 Advanced Coding
ENG EC 733 Discrete Event Simulation

ENG EC 770 Optoelectronics
ENG EC 772 VLSI Graduate Design Project
ENG EC 775 VLSI Devices and Models
ENG EC 782 RF/Analog IC Design

ENG EC 744 Mobile Computing and Networking
ENG EC 749 Interconnection Networks

Software
ENG EC 504 Advanced Data Structures
ENG EC 511 Software Systems Design
ENG EC 512 Enterp. Client-Server Softw. Sys. Design
ENG EC 518 Softw. Proj. Manag. for Softw.-Ints Sys
ENG EC 535 Introduction to Embedded Systems
ENG EC 544 Networking the Physical World
ENG EC 712 Adv. Software for Computer Engineers
ENG EC 728 Design/Test. of Dist. Softw.-Intensive Syst.
ENG ME 732 Combinatorial Optim. and Graph Algor.

High Performance Computing Applications
ENG EC 504 Advanced Data Structures
ENG EC 500 High Perf. Programming: Multicore, GPUs
ENG EC 713 Parallel Computer Architecture
ENG ME 702 Computational Fluid Dynamics
ENG ME 719 Computational Problem Solving
ENG ME 732 Combinatorial Opt. and Graph Algorithms
ENG BE 505 Molecular Bioengineering I
ENG BE 562 Computational Biology
ENG BE 561 DNA and Protein Sequence Analysis
ENG BE 703 Numerical Methods and Modeling in BME
ENG BE 777 Computational Genomics I
CAS MA 539 Methods of Scientific Computing