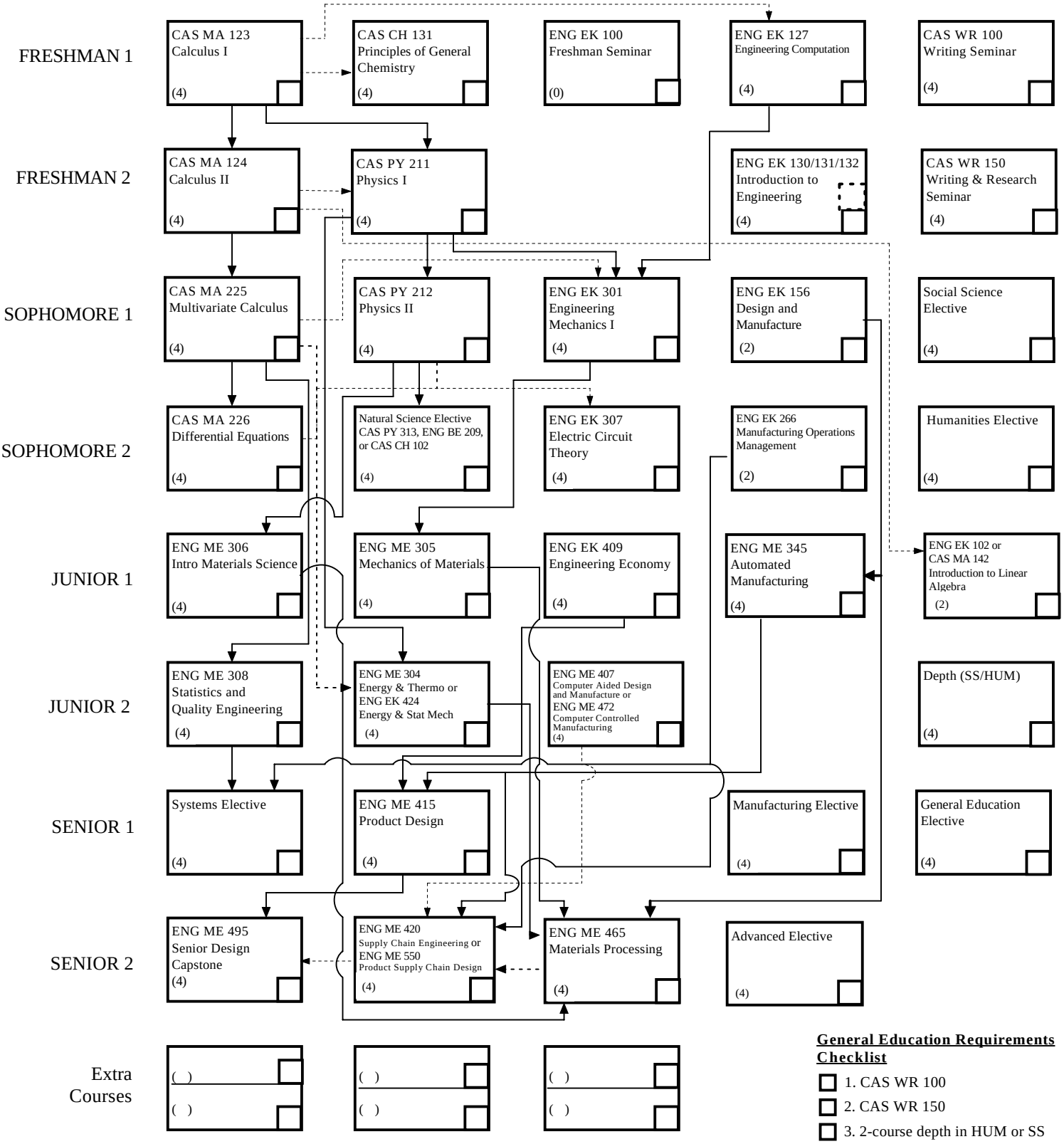
BOSTON UNIVERSITY COLLEGE OF ENGINEERING
Undergraduate Program Planning Sheet

NAME:_____ **B.U.I.D.#** U_____

MAJOR: MANUFACTURING ENGINEERING 2010 **DATE:** _____



Prereq.= ——
Coreq.= - - - - -

☐ **GRADUATION REQUIREMENT: 134 credits**
☐ **Residency Requirement:** 48 credits/Upper Division Program Courses at Boston University completed within 5 years preceding graduation

General Education Requirements Checklist

- ☐ 1. CAS WR 100
- ☐ 2. CAS WR 150
- ☐ 3. 2-course depth in HUM or SS
- ☐ 4. 1 course HUM or SS (in other than Depth)
- ☐ 5. 1 course General Education Elective
- ☐ 6. Total of at least 24 credits

MANUFACTURING ENGINEERING ELECTIVES

Systems Electives:

The Systems Elective is intended to provide depth in the area of manufacturing systems, building on the material from ENG ME 308 (Statistics and Quality Engineering). The options are:

ENG ME 404 Dynamics and Control of Mechanical Systems
ENG ME 411 Operations Research
ENG ME 507 Process Modeling and Control
ENG ME 510 Production Systems Analysis
ENG ME 514 Simulation
ENG ME 518 Product Quality

Manufacturing Electives:

The Manufacturing Elective is intended to provide depth in an area of Manufacturing Engineering of particular interest to the student. Any course from above that has not been used to satisfy the Systems Elective may be used as a Manufacturing Elective. Other options are:

ENG ME 407 Computer-Aided Design and Manufacture (if not used for ME 472/ME 407)
ENG ME 467 Senior Honors Thesis
ENG ME 472 Computer Controlled Manufacturing (if not used for ME 472/ME 407)
ENG ME 502 Intellectual Assets: Creation, Protection, and Commercialization
ENG ME 517 Product Development
ENG ME 522 Technology Ventures
ENG ME 523 Mechanics of Biomaterials
ENG ME 526 Simulation of Physical Processes
ENG ME 527 Transport Phenomena
ENG ME 529 Thermodynamics and Kinetics of Materials and Processes
ENG ME 531 Phase Transformations
ENG ME 532 Atomic Structure and Dislocations in Materials
ENG ME 534 Materials Technology for Microelectronics
ENG ME 535 Green Manufacturing
ENG ME 544 Networking the Physical World
ENG ME 545 Electrochemistry of Fuel Cells and Batteries
ENG ME 550 Product Supply Chain Design
ENG ME 555 MEMS: Fabrication and Materials
ENG ME 560 Precision Machine Design and Instrumentation
ENG ME 568 Modeling of Pattern Transfers in Microlithography
ENG ME 570 Robot Motion Planning
ENG ME 579 Microelectronics Device Manufacturing
ENG ME 583 Product Management
ENG ME 584 Manufacturing Strategy
ENG ME 585 Interactive Computation for CAD/CAM

Advanced Electives:

The manufacturing engineering Advanced Elective is intended to provide additional depth in an advanced area of particular interest to the student. The courses acceptable as advanced electives include most 300 level or above courses in Engineering, Mathematics, and Natural Sciences. The following is the list of pre-approved advanced electives; other courses may be petitioned. Additionally, any manufacturing or systems elective that has not been used to satisfy the manufacturing or systems elective requirement may be used as an advanced elective.

ENG ME 302 Engineering Mechanics II
ENG ME 303 Fluid Mechanics
ENG ME 307 Flight Structures
ENG ME 309 Structural Mechanics
ENG ME 400 Engineering Mathematics
ENG ME 419 Heat Transfer
ENG ME 566 Advanced Engineering Mathematics

ENG EC 311 Introduction to Logic Design
ENG EC 401 Signals and Systems
ENG EC 402 Control Systems
ENG EC 410 Introduction to Electronics
ENG EC 421 Digital Circuits
ENG EC 524 Optimization Theory

ENG EK 420 Parallel Computing
ENG EK 514 Computational Methods for Continuum Problems