QUEST

CURRICULUM AND COURSEWORK

Information for Cohorts 29 and above
The QUEST Curriculum

QUEST’s 5 Course Curriculum

Three Required Courses

These courses are required for all QUEST students and are cohort-based courses

- BMGT/ENES 190H: Introduction to Design and Quality (4 credits)
- BMGT/ENES 390H: Systems Thinking for Managerial Decision Making (3 credits)
- BMGT/ENES 490H: QUEST Consulting and Innovation Practicum (4 credits)

Two Elective Courses*

QUEST students are required to take at least one applied data analysis course before taking BMGT/ENES 490H and can select from the “QUEST-Only” or “Regular” electives to fulfill the second requirement during the semester of their choice.

Elective #1: Applied Data Analysis Elective (to be taken prior to BMGT/ENES 490H)

- BMGT 430: Linear Statistical Models in Business
- BMGT 431: Data Analytics
- BMGT 438A/ENES 489A: Applied Quantitative Analysis (QUEST-Only)
- BMGT 452: Marketing Research Methods
- CMSC 320: Introduction to Data Science
- ENME 440: Applied Machine Learning for Engineering and Design
- ENME 466: Lean Six Sigma

Elective #2: Other Elective (to be taken any time)

- QUEST-Only Electives
  - BMGT/ENES 397: Mentoring Design and Quality Teams
  - BMGT 438G/ENES 489Q: Design and Innovation in Silicon Valley
  - BMGT 438Q/BMGT 438K/BMGT 438L: Doing Business in Asia
  - BMGT/ENES 491: Defining Consulting and Innovation Projects

- Regular Electives
  - BIOE 485: Capstone Design I Entrepreneurship, Regulatory Issues, and Ethics
  - BMGT 332: Operations Research for Management Decisions
  - BMGT 352: Customer Centric Innovation
  - BMGT 385: Operations Management
  - BMGT 403: Systems Analysis and Design
  - BMGT 434: Introduction to Optimization
  - BMGT 452: Marketing Research Methods
  - BMGT 485: Project Management
  - BMGT 487: Six Sigma Strategy and Methods
  - BMGT498L: Innovo Consulting Practicum: Transform Learning
  - CMSC 320: Introduction to Data Science
  - CMSC 434: Introduction to Human-Computer Interaction
  - CMSC 435: Software Engineering
  - CMSC 436: Programming Handheld Systems
  - ENCE 320: Introduction to Project Management
  - ENEE 408G: Multimedia Signal Processing
ENEE 605: Design and Fabrication of Micro-Electro-Mechanical Systems
ENES 460: Fundamentals of Technology Start-Up Ventures
ENES 462: Marketing High-Technology Products and Innovations
ENES 489P: Hands-On Systems Engineering Projects
ENME 371: Product Engineering and Manufacturing
ENME 421: Engineering Design Ideation
ENME 426: Production Management
ENME 464: Cost Analysis for Engineers
ENME 489Q: Managing for Innovation and Quality

*This list is current as of Summer 2017 and is subject to change. Students are welcome to nominate other courses to be added to the list; the QUEST Curriculum Review Committee will review and approve nominations. To nominate a course, please contact Dr. Jeffrey Herrmann at jwh2@umd.edu.

**If interested in viewing any of the syllabi for the courses above, please contact Dr. Jeffrey Herrmann at jwh2@umd.edu.