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
ECON 422: Econometrics I
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 438M: Leading Innovation and Design in a Cross-Cultural Setting (QUEST to Spain)
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: Analytics Consulting: Cases and Projects
BMGT 452: Marketing Research Methods
BMGT 485: Project Management
BMGT 487: Six Sigma Strategy and Methods
BMGT 498L: Innovo Consulting Practicum: Transform Learning
CMSC 320: Introduction to Data Science
CMSC 434: Introduction to Human-Computer Interaction
CMSC 435: Software Engineering
ENAE 483: Principles of Space Systems Design
ENCE 320: Introduction to Project Management
ENCE 325: Introduction to Construction 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
ENES 499: Senior Projects in Engineering
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 Spring 2018 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. Pamela Armstrong at parmstro@rhsmith.umd.edu.

**If interested in viewing any of the syllabi for the courses above, please contact Dr. Pamela Armstrong at parmstro@rhsmith.umd.edu.