

INFO 6215 Business Analysis & Information Engineering [Fall 2025]

Course Information

Course Title: Business Analysis & Information Engineering

Course Number: INFO 6215 Term and Year: Fall 2025

Credit Hour: 4

Course Format: On-Ground

Instructor Information

Full Name: Molly Sun

Email Address: mo.sun@northeastern.edu

Office Hours: Wed 3-4pm, Fri 3-4pm, or by appointment

Instructor Biography

Molly Yingnan Sun is a seasoned tech product leader with over 10 years of industry experience and a strong background in education. She specializes in product innovation, SaaS, PaaS, and Data product management and development. Molly holds an MS in Business focusing on Enterprise Risk Management from Columbia University and a BS in Management Information Systems from Northeastern University.

Course Description

This course will develop the skills necessary for the analysis, planning, communication, and execution of business and change strategy in today's evolving world. Students will learn the software development life cycle and how product management, design, engineering, and data teams collaborate to solve problems and build software products. The course will also incorporate product management methodologies and entrepreneurship topics, providing a comprehensive understanding of business strategy and innovation.

Course Learning Outcomes

- Understand the fundamentals of the SDLC.
- Explore the roles and collaboration of product management, design, engineering, and data teams.
- Learn product management methodologies and entrepreneurship concepts.
- Apply theoretical knowledge to practical, real-world scenarios.

Course Schedule/Topics Covered

Date	In Class Topic	Assignment Due	
Week 1 Introduction to Business Analysis and Information Engineering	Course Overview What makes software products great. Who build great software products?	Assignment: What's your favourite product and how would you improve it?	
Week 2: Idea Generation and Validation	How each phase contributes to successful software products. Idea generation and Idea Validation.	Assignment: Build X proudct for Y	
Module 3: Software Development Lifecycle	Introduction to business analysis SDLC basics Phases of SDLC (Ideation, Design, Implementation, release, iteration).	Assignment: Validating and Refining Your Product Idea	
Week 4: Product Roadmap and Requirement	Creating a product roadmap, strategic planning, and prioritizing features.	Assignment: Build a roadmap and PRD Build a Pitch Deck	
Week 5: Product Design and User Experience (UX)	Topics: Principles of product design, UX/UI basics, prototyping tools.	Assignment: Create wireframes for your product	
Week 6: Design Presentation	Design Presentation and Al Tools		
Week 7: Data and Metrics	Topics: Data and Metrics for Product Managers	Assignment: Refine metrics for your week 2 assignment Group Project Kick-off: Idea for your Group Project	
Week 8: Market Analysis and Competitive Landscape	Topics: Techniques for market analysis, understanding the competitive landscape.	Case Study: Competitive analysis of a tech company.	

Week 9: Building a Business Model	Topics: Business Model Canvas, value proposition, customer segments, revenue streams	Assignment: Build a business model canvas for your week 2 product
Week 10: Soft Skills for Product Managers	Topics: Influence, negotiation and other soft skills	
Week 11: Product Management Interviews	Topics: Type of product management interview questions. Tips and strategies.	Research Study: Interview at least two individuals working in the software industry to gain insight into their roles, work, and collaboration with colleagues or clients.
Week 12: Final Project Presentations and Peer Reviews	Topics: Presentation of final projects, peer reviews, and feedback sessions.	Group Project: Present group projects

Assignment Grading

- Class attendance and participation 30%
- Assignments 50%
- Group project report & presentation 20%

Grading Scale

	87-89.9% B+	77-79.9% C+	
95-100% A	84-86.9% B	74-76.9% C	
90-94.9% A-	80-83.9%B-	70-73.9% C-	69.9% or below F

Attendance/Late Work Policy

Attendance Policy

Students registered in MGEN courses (INFO, CSYE, and DAMG) are allowed a maximum of 2 absences per course, with 3 or more absences resulting in an automatic 'F' for that course. Students are expected to inform their instructors of any absences in advance of the class; if a student is sick long-term or experiences a medical issue that prevents class attendance, it is strongly encouraged that they speak with their Academic Advisor (coe-mgen-gradadvising@northeastern.edu) to learn more

about the Medical Leave of Absence. Should a student anticipate being unable to attend 3 or more classes, they should discuss their situation with their Academic Advisor to explore other types of leave in accordance with the University's academic and global entry expectations. International students should review the Office of Global Services webpage to understand their visa compliance requirements.

Teaching Assistants (TAs) or Instructional Assistants (IAs) will be present at each class to collect student attendance.

Late Work Policy

Students must submit assignments by the deadline in the time zone noted in the syllabus. Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Work submitted late without prior communication with faculty will not be graded.

End-of-Course Evaluation Surveys

Your feedback regarding your educational experience in this class is particularly important to the College of Engineering. Your comments will make a difference in the future planning and presentation of our curriculum.

At the end of this course, please take the time to complete the evaluation survey at https://neu.evaluationkit.com. Your survey responses are completely anonymous and confidential. For courses 6 weeks in length or shorter, surveys will be open one week prior to the end of the courses; for courses greater than 6 weeks in length, surveys will be open for two weeks. An email will be sent to your Northeastern University Mail account notifying you when surveys are available.

Academic Integrity

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all examinations, tests, papers, creative projects, and assignments of any kind according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

Go to http://www.northeastern.edu/osccr/academic-integrity-policy/ to access the full academic integrity policy.

MGEN Student Feedback

Students who would like to provide the MGEN unit with <u>anonymous</u> feedback on this particular course, Teaching Assistants, Instructional Assistants, professors, or to provide general feedback regarding their program, may do so using this survey: https://neu.co1.qualtrics.com/jfe/form/SV cTIAbH7ZRaaw0Ki

University Health and Counseling Services

As a student enrolled in this course, you are fully responsible for assignments, work, and course materials as outlined in this syllabus and in the classroom. Over the course of the semester if you experience any health issues, please contact UHCS.

For more information, visit https://www.northeastern.edu/uhcs.

Student Accommodations

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit https://drc.sites.northeastern.edu.

Library Services

The Northeastern University Library is at the hub of campus intellectual life. Resources include over 900,000 print volumes, 206,500 e-books, and 70,225 electronic journals.

For more information and for education specific resources, visit https://library.northeastern.edu Network Campus Library Services: Northeastern University Library Global Campus Portals

24/7 Canvas Technical Help

For immediate technical support for Canvas, call 617-373-4357 or email help@northeastern.edu

Canvas Student Resources: https://canvas.northeastern.edu/student-resources/

For assistance with my Northeastern e-mail, and basic technical support:

Visit ITS at https://its.northeastern.edu

Email: help@northeastern.edu

ITS Customer Service Desk: 617-373-4357

Diversity and Inclusion

Northeastern University is committed to equal opportunity, affirmative action, diversity, and social justice while building a climate of inclusion on and beyond campus. In the classroom, members of the University community work to cultivate an inclusive environment that denounces discrimination through innovation, collaboration, and an awareness of global perspectives on social justice.

Please visit http://www.northeastern.edu/oidi/ for complete information on Diversity and Inclusion

Title IX

Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal financial assistance.

Northeastern's Title IX Policy prohibits Prohibited Offenses, which are defined as sexual harassment, sexual assault, relationship or domestic violence, and stalking. The Title IX Policy applies to the entire community, including male, female, transgender students, faculty, and staff.