

CISC 498: Information Technology Project

Some Important Information

2025-26

About the Instructor

- **Instructor**

- Anwar Hossain, PhD
- Associate Professor, School of Computing, Queen's University
- **Contact:** 529 Robert Sutherland Hall, ahossain@queensu.ca

- **Teaching Assistant**

- Fozle Rabbi Shafi
- Graduate Student
- **Contact:** shafi.f@queensu.ca

CISC 498

- Capstone course of the Software Design program (SODE)
- Format – no lectures, presentations and report only
- Objective
 - **Application of software engineering techniques** to the development of a substantial software system
 - **Communicate with a customer** to define and deliver a system that meets the customer's needs
 - **Collaborate with colleagues** to develop a software system (group work, oral presentation, participation software artifact review meetings)
 - **Deliver** software requirements specification and design, quality assurance plan, and a working software

Stakeholders

- **Coordinator – Anwar Hossain (email)**
 - to organize and oversee a number of meetings and presentations
 - assist you in finding a supervisor
 - help you in accessing to the resources you need
 - evaluate your work (together with the customers and supervisors)
- **Teaching Assistant – Folze Rabbi Shafi (OnQ and email)**
 - primary contact person for the submissions
- **Group members**
 - registered for this course
 - 4-5 members

Stakeholders - contd

- **Customer**

- Suggested a project already
- Meet customers to develop requirements (contact info available on the website)
- It is your responsibility to inform the customer about your presentation
- Advise customer to become familiar with the customer related information on the course website

- **Supervisor**

- School of computing (or cross-appointed) faculty members
- First choice: software engineering faculty members
- Start contacting potential supervisors
- It is your responsibility to inform the supervisor about your presentation

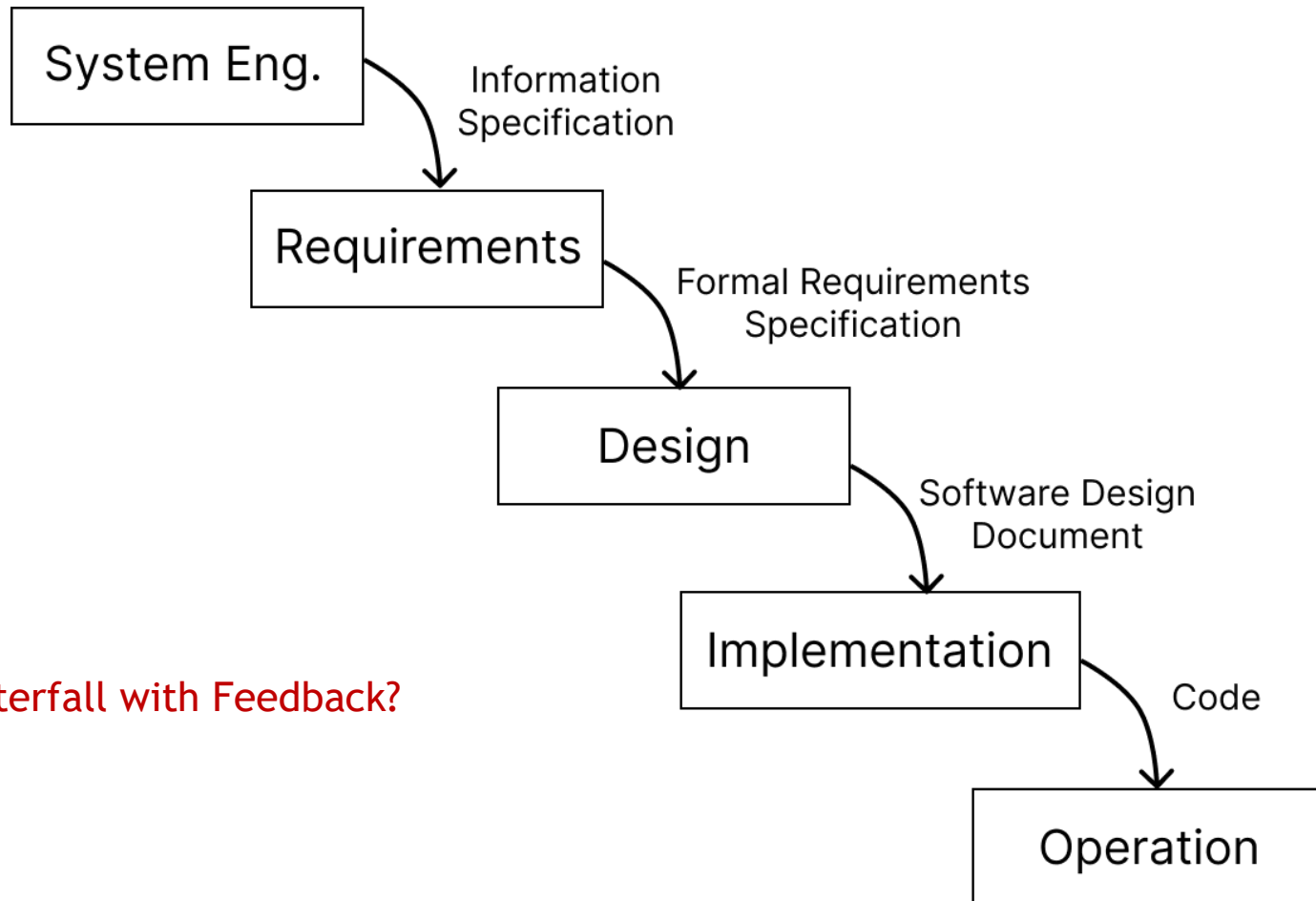
Software Engineering

- **Software engineering (definitions from various sources)**
 - Software development is **not only programming**
 - **Multi-person** construction of multi-version software
 - **Engineering techniques and methods** for building large software systems by a number of people in an **systematic way**
 - Each software process model includes **a set of steps** to build a software product - **software life cycle model**

Software Process Models

- **Most software life cycle models include the following steps**
 - **Requirements**
 - **Specification**
 - **Design**
 - **Programming**
 - **Integration**
 - **Testing (may be attached to any steps?)**
 - **Operation and Maintenance**
- **Some most commonly used models**
 - **Waterfall Model**
 - **Prototyping model**
 - **Spiral model**

Waterfall Model



Waterfall with Feedback?

Waterfall – Advantages and Disadvantages

- **Advantages**

- Prescribes a strict disciplined approach following well-defined tasks
- Separation of phases and transitions among them - separation of tasks
- Documentation helps reduce maintenance

- **Disadvantages**

- Client: “I know this is what I asked for, but this is not what I really wanted”
- Heavily documentation dependent – too much overhead for small software

Important Dates

- **Schedule: Tuesdays, 2:30 pm-5:30 pm, NICOL HALL RM 321**
- **Important Dates**

What	When	Weight
Contract plus initial project plan	Sept. 23, 2025 (23:59:59 EST, onQ + email to TA and supervisor)	5%
Requirements document	Oct. 28, 2025 (23:59:59 EST, onQ + email to TA and supervisor)	10%
Requirements presentation	Oct. 28, 2025	5%
Design document	Dec. 2, 2025 (23:59:59 EST, onQ + email to TA and supervisor)	10%
Design presentation	Dec. 2, 2025	5%
Quality assurance and deployment plan document	Jan. 27, 2026 (23:59:59 EST, onQ + email to TA and supervisor)	10%
Quality assurance and deployment plan presentation	Jan. 27, 2026	5%
Weekly progress reports (email to supervisor & customer)	By email, each Thursday, starting January 13, 2026	5%
Final project documentation	March 31, 2026 (23:59:59 EST, onQ + email to TA and supervisor)	15%
Final project presentation (delivered system to customer)	March 31, 2026 (demo, software and documentation delivery)	25%
Final poster submission/presentation	Creative Computing Showcase, TBD	5%
Total		100%

Next Tasks and Submission

- **Form the group**
- **Submit your group information to the TA (identify a team lead) by **September 16, 2025****
- **Choose and contact the customer**
- **Find a supervisor**
- **Finalize the project plan**
- **Sign and submit the contract (**Monday, September 23, 2025**)**
- **Check the resource page for example documents and guidelines**

Some Important Points

- **Documents not submitted by the due date will face a penalty of 10%**
- **All members of the group are expected to cover a part of each presentation**
- **Attendance at meetings/presentations is mandatory**
- **Who did what?** Each submitted document and email reports should explicitly identify the contributions of each group member
- **Next Deadline: Contract plus initial project plan, Monday, September 23, 2025**

Some Important Points – contd.

- If you cannot find a group by next week, please contact the TA**
- If you cannot find a supervisor by the deadline, please contact me**
- If you sense any problem in the group, please contact your supervisor and me ASAP**
- Any questions? Please email me or the TA.**
- For detail information: <http://cs.queensu.ca/home/cisc498/>**