

1. Curriculum Structure

Type 3 (Plan B)

Degree Requirements a minimum of 36 credits

A. Coursework a minimum of 30 credits

1. Graduate Courses a minimum of 30 credits

1.1.1 Field of Specialization a minimum of 30 credits

1.1.2 Required courses 18 credits

953701 Introduction to Software Development 3 credits

953702 Introduction to Software Process Management 3 credits

953721 Software Requirements Engineering 3 credits

953725 Software Verification and Validation 3 credits

953781 Software Project Management 3 credits

953791 Seminar in Software Engineering 3 credits

1.1.2 Elective courses a minimum of 12 credits

By choosing from these courses or other courses approved by the Graduate Study Committee.

952703 Applications of Information and Communication Technology in Knowledge Management 3 credits

953711 Introduction to Agile Software Development 3 credits

953722 Software Construction and Evolution 3 credits

953723 Software Process and Quality Assurance 3 credits

953724 Software Configuration Management 3 credits

953726 Software Formal Specification 3 credits

953741 Software Engineering for Large Enterprise Applications 3 credits

953742 Software Engineering for Industrial Applications 3 credits

953743 Software Engineering for Business Applications 3 credits

953761 Software Engineering for System and Network Programming 3 credits

953762 Software Engineering for Mobile Computing 3 credits

953771 User Experience Design 3 credits

953772 Introduction to Big Data 3 credits

953773	Artificial Intelligence Techniques in Software Engineering	3	credits
953774	Software Engineering for Serious Game Design	3	credits
953782	Software Entrepreneur Economics	3	credits
953783	Security System and Management	3	credits
953784	Software Project Risk Management	3	credits
953785	Knowledge Engineering and Management	3	credits
953789	Selected Topics in Software Engineering	3	credits

1.2 Other courses - none -

2. Advanced Undergraduate Courses - none -

B. Thesis 6 credits

953798 Independent Study 6 credits

C. Non-credit Courses

1. Graduate School requirement: - a foreign language -

2. Program requirement - none -

D. Academic activities

1. A student has to organize and present paper in a seminar on the topic related to his/her independent study at least once.
2. Have at least one national or international field trip depending on the curriculum committee approval.
3. The whole or part of the independent study must be published in CMU Graduate School Journal or any publications which the curriculum committee and the Graduate School have approved. According to announcement of Graduate School, subject: Criteria and Operating Procedure for Thesis Publication.

E. Comprehensive Examination

Having submitted a request form to the Graduate School, approved by general advisor or major thesis advisor, a student must then complete a comprehensive examination.