



# WRIGHT STATE *UNIVERSITY*

## **Department of Computer Science and Engineering Program Guide and Policies**

**Master's of Science in Computer Science  
Master's of Science in Computer Engineering  
Master's of Science in Cyber Security  
Doctor of Philosophy in Computer Science and Engineering**

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# 1 Master's of Science Programs

THE Master's of Science Degree signifies a high level of expertise in one or more fields of study within the discipline. Master's degree candidates pursue a program of study consisting of graduate coursework and, optionally, a faculty-guided research program culminating in the completion of a capstone project or Master's thesis.

## 1.1 Admission Requirements

Program admission is based on a completed application of background information, submitted transcripts for undergraduate coursework and prior graduate coursework, and GRE scores. Applicants must satisfy requirements for admission into the Wright State University Graduate School and additionally demonstrate a sound understanding of computer science and/or engineering fundamentals to be admitted to the program. Complete application packages shall be reviewed by the admissions subcommittee of the department Graduate Studies Committee, which shall make a recommendation to the Graduate Program Director. Final admission decisions will be made by the Graduate Program Director. Generally, successful applicants to the program will satisfy the following criteria:

- a B.S. or M.S. degree in Computer Science, Computer Engineering, or a closely-related field, with a minimum GPA of 3.0.
- Graduate Record Examination (GRE) with a composite score not lower than 298.
- Students applying from overseas will need to provide evidence of English language proficiency satisfying University requirements.

The GRE requirement is waived for Wright State University graduates with a BS degree in Computer Science and Engineering and minimum GPA of 3.3. This requirement is also waived for applicants from a U.S. institution with a graduate degree in a science or engineering field. Finally the GRE requirement is waived for non-degree CSE graduate students and LEAP students if their GPA for 9 or more hours of CSE graduate courses at the 6000 level or higher at Wright State University is 3.3 or higher.

Admission to the M.S. programs is competitive. Meeting these minimum qualifications does not guarantee admission to the program. A student should come to the program with knowledge of high-level programming languages, data structures, real-time programming, computer organization, formal languages, operating systems and computer systems design; however, it may be possible to make up minor deficiencies after admission to the program by taking appropriate program-prerequisite courses. Such courses will be assigned upon admission, and may not be used to otherwise fill M.S. program requirements.

## 1.2 Program Process and Milestones

### 1.2.1 Prepare a Program of Study

All Masters degree students must submit a program of study meeting all program requirements to the Program Coordinator by the time they complete 12 graduate credit hours towards their degree.

### **1.2.2 Program Prerequisite Courses**

Students that have been assigned program prerequisite courses must enroll for one such course every semester (excluding summer semesters) until all program prerequisites are passed with a grade of C or higher. Students with outstanding program prerequisites that are not registered for any prerequisite courses in a given semester will be administratively dropped from all registered courses. For program prerequisite courses offered at both the 4000 and 6000 level, it is recommended that students take these courses at the 4000 level.

### **1.2.3 Complete all Required Coursework**

Complete all required core courses and elective courses included in your program of study. According to Graduate School policy, no more than two grades of 'C' may be counted towards the fulfillment of your course requirements. Full details on academic standards and course grading policies may be found at:

<https://www.wright.edu/graduate-school/academics/policies-and-procedures-index>

### **1.2.4 Complete Capstone Project or Thesis, if Required**

Details on the requirements for capstone projects and theses may be found in the following sections.

### **1.2.5 Apply for Graduation**

In the semester in which you will complete all of your degree requirements, you must apply for graduation. Procedures and deadlines for applying for graduation may be found at:

<https://www.wright.edu/graduate-school/academics/policies-and-procedures/procedure-for-graduation>

### **1.2.6 Time Limit**

Students in thesis or project programs are expected to meet all degree requirements after no more than five semesters enrolled in the program. After the fifth semester, the student's thesis or project committee must meet to determine a plan and timeline for degree completion. A meeting summary including this plan must be signed by the student and the committee, and approved by the Program Director. The Program Director may recommend dismissal from the program or a change of thesis/project advisor and/or committee membership if the student does not meet the proposed timeline, or the timeline is not approved by the Program Director.

Students not enrolled in thesis or project programs must complete all degree requirements within 6 years. Students that have not completed all requirements after six years will be subject to dismissal from the program.

### **1.2.7 Academic Standards and Probation**

Students are responsible for knowing and adhering to the Graduate School's policies regarding grades, academic standards, and probation. These policies can be found at:

<https://www.wright.edu/graduate-school/policies-and-procedures-manual>

## **1.3 Requirements and Milestones for Capstone Projects**

Some program options require a capstone project. The capstone project is intended to assess a student's ability to apply the concepts from their formal graduate coursework to current, practical problems relevant to the field. Unlike a Masters thesis, the capstone project does not require an original, unique contribution to the state of the art. However, the project should require demonstration of graduate level mastery over a substantial body of concepts in the student's major. Projects may include (but are not limited to) implementation and/or robust testing of software artifacts relevant to the field, replication of previous research results, collection, curation and analysis of real-world or simulation-based data of value in the profession, conduct of a comprehensive literature review in a specific area related to modern practice of the profession, and so forth.

### **1.3.1 Project Committee Selection**

Prior to registering for CS 7960 students should select an advisory committee consisting of a project advisor and one other committee member. The project advisor must be a graduate faculty member with primary appointment in the Department of Computer Science and Engineering. The other committee member must be a full or adjunct member of the Wright State University Graduate Faculty.

### **1.3.2 Determine the Scope and Topic of the Project**

Prior to enrolling in CS 7960 the student and the project advisor shall determine and document the scope of the project, specific deliverables such as software, data, or written reports, and expected outcomes.

### **1.3.3 Execute the Project and Prepare a Project Report**

In addition to any deliverables defined above, the student shall produce a written report that details the project significance, related work, work completed, and project outcomes. In cases where the primary deliverable is a written work product (such as a literature review, position paper, or protocol proposal) this written product may also serve as the written project report.

All course work associated with the project must earn a grade of "C" or better or "P" in order to qualify the student for graduation; all grades for project work will be given in each semester for which project credit is awarded. The project report must be written in English.

### **1.3.4 Orally Defend the Project Results**

Each candidate is required to give an oral presentation to defend the results of their work to the project committee. The project director, in consultation with the committee, will determine when the student has completed sufficient research to defend the project report. The project director is the chair of the project report defense. The examination consists of a presentation of the student's work and a question-and-answer period. The defense can be presented remotely with permission of the project director. Unanimous consent of the project committee is required to pass the project defense. A signed form indicating acceptance of the student's project by the project committee is required for graduation.

## **1.4 Requirements and Milestones for the Master's Thesis**

### **1.4.1 Thesis Committee Selection**

Students enrolled in the thesis option must select their thesis committee in coordination with their thesis advisor. The thesis committee will consist of at least three regular or adjunct members of the graduate faculty, including the thesis director. The thesis director must be a fully-affiliated member of the Department of Computer Science and Engineering. At least one other committee member must be a fully-affiliated or adjunct member of the Department. The final committee member may be external to the Department and/or the University.

A thesis committee approval form, signed by each of the nominated committee members and the student should be submitted to the Program Coordinator.

Co-Director Adjunct members of the graduate faculty may be eligible to co-direct a thesis along with fully-affiliated member of the Department of Computer Science and Engineering. Co-directors will be selected and nominated in accordance with salient M.S. Program Policies.

### **1.4.2 Prepare the Thesis**

The thesis is an original contribution to scholarly, technical, or scientific knowledge in a specialized area. The thesis must provide convincing evidence of mastery in the techniques of research and a thorough understanding and application of the subject matter.

All course work associated with the thesis on the student's program of study must earn a grade of "P" in order to qualify the student for graduation; all grades for thesis work will be given in each semester for which thesis credit is awarded. The thesis must be written in English. A complete written draft of the thesis should be provided to all members of the thesis committee at least two weeks before the oral defense.

### **1.4.3 Orally Defend the Thesis**

Each candidate is required to give an oral presentation to defend the findings in the written thesis to the M.S. Thesis Committee. The thesis director, in consultation with the committee, will determine when the student has completed sufficient research to defend the thesis. The thesis director is the chair of the thesis defense. The examination consists of a public presentation of the

student's research and a public question-and-answer period. The thesis committee may also hold an interrogatory session with the student that is not open to the public. Unanimous consent of the thesis committee is required to pass the thesis defense.

#### **1.4.4 Finalize the Thesis Document**

Candidates are required to submit an edited thesis document incorporating all changes requested by the committee. The final written thesis must be approved and signed by all members of the thesis committee and submitted to the Department of Computer Science and Engineering.

#### **1.4.5 Disseminate the Thesis**

A computer file containing an approved thesis, in PDF format, must be transmitted to [OhioLINK](#) and to the Department not later than 30 days after the end of the semester in which the degree will be granted ([due dates](#) are published by the Graduate School and distributed to program offices). Instructions for submitting the student thesis are on the [OhioLINK Web site](#).

OhioLINK is the repository for Electronic Theses and Dissertations (ETDs) for the state universities system in Ohio. This final copy should follow the form prescribed in the [Graduate Thesis/Dissertation Handbook](#), available at the [Graduate School Web site](#) and should be carefully produced, free of errors in style, mechanics, and format. The PDF file must include the typed thesis approval page, *but without signatures*.

One (1) paper copy of the typed thesis approval page, *with signatures*, must be submitted to the Graduate School and to the Department for filing. The ETD cannot be approved until the Graduate School receives the paper copy of the signed thesis approval page. Please consult the [Graduate Thesis/Dissertation Handbook](#) for additional information and details about preparing the student ETD.

### **1.5 The Master's of Science in Computer Science**

#### **1.5.1 Program Objectives**

Graduates of the Master's of Science program in Computer Science shall

- Have the ability to apply abstract reasoning to complex problems in computer science, and
- Have the ability to solve a broad range of problems through the application of current computer science techniques.

#### **1.5.2 Degree Requirements**

##### ***Thesis Option***

The thesis option requires satisfactory completion of a master's thesis in the context of a program of study that includes:



- a total of at least 30 graduate credit hours in CS/CEG courses, including
- at least 6 hours of 7000-level formal courses, in addition to the core courses
- no more than 3 credit hours of independent study,
- no more than 9 credit hours of thesis,
- at least 16 credit hours of CS courses, and
- satisfactory completion of the computer science core

### ***Non-Thesis Option***

The non-thesis option requires satisfactory completion of a program of study that includes:

- a total of at least 30 graduate credit hours in CS/CEG courses, including
- at least 12 hours of 7000-level formal courses, in addition to the core courses
- no more than 3 credit hours of independent study, which counts as a 6000-level course,
- at least 16 credit hours of CS courses, and
- satisfactory completion of the computer science core

### **1.5.3 Computer Science Core Courses**

To satisfy the Computer Science Core, the student must pass one course from each of the two categories below:

#### **Theory**

- *CS 7200 – Algorithm Design and Analysis*

#### **Software and Systems**

- *CS 7100 – Advanced Programming Languages, OR*
- *CS 7140 – Advanced Software Engineering, OR*
- *CEG 7370 – Distributed Computing*

## **1.6 The Master’s of Science in Computer Engineering**

### **1.6.1 Program Objectives**

Graduates of the Master’s of Science program in Computer Engineering shall

- Have the ability to apply abstract reasoning to complex problems in computer engineering, and
- Have the ability to solve a broad range of problems through the application of current computer engineering techniques.

## 1.6.2 Degree Requirements

### *Thesis Option*

The thesis option requires satisfactory completion of a master's thesis in the context of a program of study that includes:

- a total of at least 30 graduate credit hours in CS/CEG courses, including
- at least 6 hours of 7000-level formal courses, in addition to the core courses
- no more than 3 credit hours of independent study,
- no more than 9 credit hours of thesis,
- at least 16 credit hours of CEG courses, and
- satisfactory completion of the computer engineering core

### *Non-Thesis Option*

The non-thesis option requires satisfactory completion of a program of study that includes:

- a total of at least 30 graduate credit hours in CS/CEG courses, including
- at least 12 hours of 7000-level formal courses, in addition to the core courses
- no more than 3 credit hours of independent study, which counts as a 6000-level course,
- at least 16 credit hours of CEG courses, and
- satisfactory completion of the computer engineering core

## 1.6.3 Computer Engineering Core Courses

To satisfy the Computer Engineering Core, the student must take one course from each category below:

### **Embedded Systems**

- *CEG 7360 – Embedded Systems*

### **Software and Systems**

- *CS 7100 – Advanced Programming Languages, OR*
- *CS 7140 – Advanced Software Engineering, OR*
- *CEG 7370 – Distributed Computing*

## 1.7 The Master's of Science in Cyber Security

### 1.7.1 Program Objectives

Graduates of the Master's of Science program in Cyber Security shall

- Have the ability to integrate and apply current computer science and engineering knowledge and techniques to solve challenging problems in cyber security, and
- Have the ability to apply concepts of cyber security defense and to use and integrate modern cyber security tools to effectively protect information, communication and computing systems.

### 1.7.2 Degree Requirements

#### *Thesis Option*

The thesis option requires satisfactory completion of a master's thesis in the context of a program of study that includes:

- a total of at least 30 graduate credit hours including:
- 12 credit hours of cyber security core courses
- 9 credit hours of thesis
- 9 credit hours of approved cyber security elective courses. The list of approved cyber security elective courses can be found at <https://engineering-computer-science.wright.edu/computer-science-and-engineering/degrees-and-certificates/master-of-science-in-cyber-security>.

#### *Project Option*

The project option requires satisfactory completion of a program of study that includes:

- a total of at least 30 graduate credit hours including:
- 12 credit hours of cyber security core courses
- 6 credit hours of capstone project
- 12 credit hours of approved cyber security elective courses. The list of approved cyber security elective courses can be found at <https://engineering-computer-science.wright.edu/computer-science-and-engineering/degrees-and-certificates/master-of-science-in-cyber-security>.

### 1.7.3 Cyber Security Core Courses

To satisfy the Computer Science Core, the student must pass each of the following courses

- CEG 6420 Host Computer Security
- CEG 6430 Cyber Network Security
- CEG 6424 Security Attacks and Defenses
- CEG 6750 Information Security

## 2 Doctor of Philosophy in Computer Science and Engineering

THE Ph.D. is the highest degree awarded by Wright State University. This pinnacle academic credential signifies a mastery of a body of skills and knowledge in preparation for a career as an independent and productive scholar. Doctoral training involves working closely with faculty on significant technological challenges of importance and mutual interest.

### 2.1 Program Objectives

Graduates of the Ph.D. program in Computer Science and Engineering shall

- Contribute to the state of the art in computer science and engineering, as documented by high-quality, peer-reviewed publications in venues appropriate to their field of study.
- Be prepared to establish independent research programs in their fields of study.
- Be able to effectively communicate technical concepts to their peers.

### 2.2 Admission Requirements

Program admission is based on a completed application of background information, submitted transcripts for undergraduate coursework and prior graduate coursework, GRE scores, and a written statement of research interests and objectives. Letters of recommendation from three referees are optional but recommended. Applicants must satisfy requirements for admission into the Wright State University Graduate School and additionally demonstrate a sound understanding of computer science and engineering fundamentals to be admitted to the program. Complete application packages shall be reviewed by the admissions subcommittee of the department Graduate Studies Committee, which shall make a recommendation to the Graduate Program Director. Final admission decisions will be made by the Graduate Program Director. Generally, successful applicants to the program will satisfy the following criteria:

- a B.S. or M.S. degree in Computer Science, Computer Engineering, or a closely-related field, with a minimum GPA of 3.3.
- Graduate Record Examination (GRE) with a composite score not lower than 305.
- Students applying from overseas will need to provide evidence of English language proficiency satisfying University requirements.

Admission to the PhD program is competitive. Meeting these minimum qualifications does not guarantee admission to the program. A student should come to the program with knowledge of high-level programming languages, data structures, real-time programming, computer organization, formal languages, operating systems and computer systems design; however, it may be possible to make up minor deficiencies after admission to the program by taking appropriate program-prerequisite courses. Such courses will be assigned upon admission, and may not be used to otherwise fill Ph.D. program requirements.

## 2.3 Degree Requirements

Students entering the Ph.D. program with a Bachelor of Science degree must complete a total of 90 credit hours, including:

- a minimum of 27 hours of formal coursework at the 7000 or 8000 level
- a minimum of 18 hours of residency research
- a minimum of 12 hours of dissertation research
- no more than 12 hours of independent study
- and the computer science or computer engineering core courses

Students entering the Ph.D. program with a Master of Science degree *in computer science, computer engineering, or a related field* must complete a total of 60 credit hours, including:

- a minimum of 9 hours of formal coursework at the 7000 or 8000 level
- a minimum of 18 hours of residency research
- a minimum of 12 hours of dissertation research
- no more than 12 hours of independent study
- and the computer science or computer engineering core courses

In addition, all students must:

- Satisfy the PhD qualifier requirement by the end of the second year in program
- Successfully defend their dissertation proposal (candidacy exam)
- Successfully defend their dissertation research
- Satisfy the program publication requirement (see below)
- Maintain a GPA of 3.0 or higher in CS/CEG courses

### 2.3.1 Core Courses (Qualifier Requirement)

To satisfy the qualifier requirement, a student must complete the Ph.D. core courses and receive course grades of either 3 A's or 2 A's and a B. A student who receives grades lower than 2 A's and a B may re-take the final examination in the course(s) not receiving an A. Re-taking the final exam in this manner does not change the students transcribed grade for the course, but can replace a lower grade for the purpose of satisfying the qualifier requirement. A student may repeat the final exam no more than one time per course registration. Students failing to satisfy the qualifier requirement within two years will be recommended to the Graduate School for dismissal from the Doctoral Program.

#### *Computer Science Ph.D. Core Courses*

To satisfy the Computer Science Core, the student must take one course from each category below:

#### **Theory**

- CS 7200 Algorithm Design and Analysis OR
- CS 7220 Computability and Complexity

#### **Software**

- CS 7100 Advanced Programming Languages OR
- CS 7140 Advanced Software Engineering

#### **Systems and Applications**

- CEG 7370 Distributed Computing OR
- CS 7700 Advanced Database Systems

#### ***Computer Engineering Core Courses***

To satisfy the Computer Engineering Core, the student must take one course from each category below:

#### **Architecture**

- CEG 7450 Advanced Computer Networks OR
- CEG 7350 Computer Architecture

#### **Hardware**

- CEG 7030 VLSI Design OR
- CEG 7360 Embedded Systems

#### **Systems and Applications**

- CEG 7370 Distributed Computing OR
- CS 7700 Advanced Database Systems

### **2.3.2 Program Standards**

#### ***Annual Review***

Each student's academic progress will be evaluated annually by the Ph.D. Program Director. On the basis of this evaluation, and after review by the Graduate School, the student will be either: Recommended for continuation in the graduate program, placed on probationary status, or dismissed from the Program. Students placed on probationary status must schedule a meeting of their dissertation committee within four weeks. At this meeting, the committee should specify conditions and deadlines for the student to be removed from probationary status.

#### ***Academic Standards and Probation***

Students are responsible for knowing and adhering to the Graduate School's policies regarding grades, academic standards, and probation. These policies can be found at <https://www.wright.edu/graduate-school/policies-and-procedures-manual>.

## **2.4 Program Process and Milestones**

### **2.4.1 Program of Study**

All Ph.D. students must submit a program of study meeting all program requirements to the Program Coordinator by the end of their second semester.

### **2.4.2 Program Qualification Exam**

Upon completion of the core requirement (described above) students are deemed to have passed the qualifier requirement. Students must complete the qualifier requirement by the end of their second year. Students that have not completed the qualifier requirement by this time will be recommended to the Graduate School for dismissal from the Ph.D. program.

### **2.4.3 Dissertation Committee Selection**

After completion of the qualifier requirement, the student is permitted to select his or her dissertation committee. A dissertation committee will be selected by the student in coordination with their dissertation director. A dissertation committee approval form, signed by each of the nominated committee members and the student should be submitted to the Program Coordinator. The nominees must then be approved by the Department Chair, the Graduate Program Director, the Dean of the College of Engineering and Computer Science, and the Dean of the Graduate School.

The committee will consist of at least four (4) regular or adjunct members of the graduate faculty, including the Dissertation Director, with at least three of these having a primary tenure-track faculty appointment in the department of Computer Science and Engineering. The Dissertation Director, who chairs the committee, must be a regular member of the graduate faculty with a primary appointment in the Department of Computer Science and Engineering. At least one member of the committee must not have a faculty appointment in the Department of Computer Science and Engineering.

Co-Director Adjunct members of the graduate faculty may be eligible to co-direct a dissertation along with fully-affiliated member of the Department of Computer Science and Engineering. Co-directors will be selected and nominated in accordance with the Ph.D. Program Policies.

In consideration of the extensive agreements which established the Dayton Area Graduate Studies Institute in 1994, Wright State recognizes regular faculty members in engineering and computer science at the other four original DAGSI institutions (Air Force Institute of Technology, University of Dayton, the Ohio State University, and University of Cincinnati) as possessing *á priori* the equivalent of adjunct graduate status.

Once formed, the membership of the dissertation committee may be changed only with permission of both the Graduate Program Director and the Department Chair.

#### **2.4.4 Residency Research**

A student must enroll in two semesters over two consecutive years of Residency Research. A student will generally enroll in Residency Research after passing the qualifier requirement, as described above. Enrollment in Residency Research prior to completion of the qualification requirement will be permitted with permission of the dissertation advisor and the Graduate Program Director.

#### **2.4.5 Candidacy Exam Requirement**

Upon completion of the residency research requirement, the student is expected to, in consultation with the dissertation director, develop a research plan that proposes an original and significant contribution expanding the state of knowledge in a specific research area. The candidacy exam (or proposal defense) is a presentation to the dissertation committee and the public, covering the current state of the art in the student's research area, their preliminary research and results, and their plan for completion of the dissertation research. The dissertation director, in consultation with the dissertation committee, will determine when the student has identified a program of research suitable for a Ph.D. dissertation and is prepared to take the candidacy examination. The examination will consist of a public presentation and a question-and-answer period. The dissertation committee may also have an interrogatory session with the student that is closed to the public. Unanimous consent of the dissertation committee is required to pass the Candidacy Examination. The research proposal must exhibit the student's thorough background knowledge of the research area, indicate previous work in the area, and explicitly outline the proposed research to be undertaken in the dissertation.

The candidacy exam will normally be administered after the student has completed 18 credits of residency research. Students that have completed at least nine credits of residency research may schedule their candidacy examination in the same term that they will complete the required 18 hours of residency research with permission of their dissertation director and the Graduate Program Director.

#### **2.4.6 Prepare the Dissertation**

The dissertation is an original, significant contribution to scholarly, technical, or scientific knowledge in a specialized area. The dissertation must provide convincing evidence of the highest level of mastery in the techniques of research and a thorough understanding and application of the subject matter.

Students conducting research towards their dissertation after completion of the candidacy exam should register for Dissertation Research. When the candidacy exam is scheduled during the first 8 weeks of a semester, a student may register for Dissertation Research in the same semester as the candidacy exam with the permission of their dissertation director and the Graduate Program Director.

All residency and dissertation research coursework on a student's program of study must earn a grade of "P" in order to qualify the student for graduation; all grades for dissertation research courses will be given in each semester for which dissertation credit is awarded. The dissertation must be written in English.



### 2.4.7 Orally Defend the Dissertation

Each candidate is required to give an oral presentation to defend the findings in the written report to the Ph.D. Dissertation Committee. The dissertation director, in consultation with the dissertation committee, will determine when the student has completed sufficient research to defend the dissertation. The dissertation director is the chair of the dissertation defense. The examination consists of a public presentation of the student's research and a public question-and-answer period. The dissertation committee may also hold an interrogatory session with the student that is not open to the public. Unanimous consent of the dissertation committee is required to pass the dissertation defense.

### 2.4.8 Finalize the Dissertation Document

Candidates are required to submit an edited dissertation document incorporating all changes approved by the dissertation committee. The final written dissertation must be approved and signed by all members of the dissertation committee and submitted to the Department of Computer Science and Engineering.

### 2.4.9 Disseminate the Dissertation

A computer file containing an approved dissertation, in PDF format, must be transmitted to [OhioLINK](#) and to the Department not later than 30 days after the end of the semester in which the degree will be granted ([due dates](#) are published by the Graduate School and distributed to the doctoral program offices). Instructions for submitting the student dissertation are on the [OhioLINK Web site](#).

OhioLINK is the repository for Electronic Theses and Dissertations (ETDs) for the state universities system in Ohio. This final copy should follow the form prescribed in the [Graduate Thesis/Dissertation Handbook](#), available at the [Graduate School Web site](#) and should be carefully produced, free of errors in style, mechanics, and format. The PDF file must include the typed dissertation approval page, *but without signatures*.

One (1) paper copy of the typed dissertation approval page, *with signatures*, must be submitted to the Graduate School and to the Department for filing. The ETD cannot be approved until the Graduate School receives the paper copy of the signed dissertation approval page. Please consult the [Graduate Thesis/Dissertation Handbook](#) for additional information and details about preparing the student ETD.

### 2.4.10 Publication Requirement

Publication in high impact conference proceedings and archival journals ensures that a student's research is disseminated to the broader scientific community, and that it has been judged to be a meaningful contribution to the field by the student's future peers. Prior to graduation, each Ph.D. student must submit evidence of at least one high-quality journal paper or two papers in high-quality, peer-reviewed conference proceedings accepted for publication. These papers should cover the research described in the student's dissertation. The student must be the first listed

author or the corresponding author on each publication submitted to satisfy this criterion.

#### **2.4.11 Time Limit**

Students must complete all degree requirements within ten years. Students that have not completed all requirements after ten years will be subject to dismissal from the program.

### **3 Department of Computer Science and Engineering Graduate Policies**

In addition to the Department policies listed below, students are expected to know and comply with all Wright State University student policies (<http://policy.wright.edu/>). Graduate students should pay particular attention to policies *3710 – Academic Integrity Standards and Process for Misconduct* and *3720 – Code of Student Conduct*. In addition, graduate students are expected to know and comply with all Graduate School Policies (<https://www.wright.edu/graduate-school/academics/policies-and-procedures-index>), and College of Engineering and Computer Science policies.

#### **3.1 International Student Policies**

##### **3.1.1 Internship and CPT**

Students applying for CPT should submit a complete CPT application to the Department along with an offer letter from the company offering employment. The offer letter must clearly describe the work to be performed by the student, which must be in the field of computer science, computer engineering, or cyber security and relevant to the student's program of study. For Ph.D. and thesis students, the CPT request must be approved by the student's dissertation or thesis advisor and the graduate program director. For non-thesis M.S. students, the request must be approved by the graduate program director.

Generally, students will be approved for full- or part-time CPT if they are in good academic standing and have a GPA of 3.2 or greater. Students in good academic standing, but with a GPA of less than 3.2 may be approved at the discretion of the graduate director.

Students registering for full- or part-time CPT should register for the corresponding zero-credit course: CS/CEG 7980 for part-time CPT and CS/CEG 7990 for full-time CPT. These courses must be included on the students current program of study.

##### **3.1.2 Reduced Course Load (RCL) Authorization**

Students requesting a reduced course load authorization should submit an RCL authorization form to the Department. For non-thesis M.S. students the RCL authorization must be approved by the graduate program director. For Ph.D. and M.S. thesis students the authorization must be approved by the student's thesis or dissertation advisor and the graduate program director.

## **3.2 Curriculum Policies**

### **3.2.1 Policy on 4000/6000 level courses**

#### **Content**

- A. Courses offered simultaneously at the 4000 and 6000 level shall include content that is targeted specifically to graduate students enrolled in the 6000-level offering. This content shall be at a level appropriate for graduate studies and sufficiently advanced to challenge graduate students in our program.
- B. This material shall be required for all students taking the 6000 level course offering.
- C. Delivery of graduate-only material is at the discretion of the course instructor, but may include additional graduate-only lectures, on-line video lectures and outside reading assignments.
- D. Course syllabi for 6000-level courses must explicitly enumerate additional learning objectives and course topics for graduate students.

#### **Evaluation**

- A. Course syllabi shall explicitly enumerate how student learning of 6000-level material is assessed. Assessment instruments are at the discretion of the instructor, but may include alternative or additional exams or exam questions, writing assignments, lab assignments and/or course projects.
- B. Assessment of graduate-level material shall constitute at least 33% of the overall course grade for students enrolled in 6000-level courses.

#### **Course assessment**

- A. The graduate studies committee shall periodically assess syllabi of 6000-level course offerings to ensure that offerings are consistent with these policies.

### **3.2.2 Second Master's Degrees**

Graduate School Policy 5560 allows students to earn a second master's degree by taking a minimum of 22 hours of graduate credit, subject to program approval. Students with an M.S. degree granted by the Department may earn a second M.S. degree within the Department by completing an additional 22 credit hours that otherwise satisfies all program requirements.

Students that have earned two M.S. degrees within the Department may petition to apply this policy in earning a third master's degree.

Students that have earned a master's degree from another, related program may petition to use the second master's policy. Such petitions should include a full transcript of all courses included in the student's prior M.S. degree.