

# **Computer Science**

## **MCS Graduate Handbook**

**Non-Thesis**

**including concentrations in**

**a) Big Data Systems and**

**b) Cybersecurity**

**2023 - 2024**

**MANUAL OF THE MASTER OF COMPUTER SCIENCE DEGREE  
AND  
CONCENTRATIONS**

**ARIZONA STATE UNIVERSITY**

**2023- 2024**

CSE graduate degrees please contact:

Office of Graduate Programs  
School of Computing and Augmented Intelligence  
Ira A. Fulton Schools of Engineering  
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PO Box 878809  
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Advising Office Phone: (480) 965-3199

CSE on the web: <https://scai.engineering.asu.edu/graduate-computer-science/>  
MCS Online website: <https://asuonline.asu.edu/online-degree-programs/graduate/computer-science-mcs/>

Tempe Campus E-mail address: [scai.grad.tempe@asu.edu](mailto:scai.grad.tempe@asu.edu)  
Online Campus Email address: [mcsonline@asu.edu](mailto:mcsonline@asu.edu)

**Addendum:** Clarification regarding transfer between programs. (pg. 6).

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## **I. Introduction to the Computer Science Program**

The Master of Computer Science (MCS) is a non-thesis degree available for the ground and online campuses. The program is ideal for students with undergraduate education in computer science or related studies. This degree features advanced course work and provides numerous opportunities for interdisciplinary study. Students have the option to pursue their studies in the following concentrations:

- Big Data Systems (BDS) or
- Cybersecurity (CS)

Here at ASU's School of Computing and Augmented Intelligence (SCAI), we envision a society where secure, accurate, and current information is ubiquitously available and data is seamlessly collected, managed, and converted into information that entertains individuals, empowers businesses, and guides the decisions of both in their daily affairs.

We envision our school as a community recognized by its colleagues internationally as a leader in envisioning and enabling the information-driven society and by its students as a preferred location for acquiring the knowledge and skills necessary to contribute to this vision.

We envision a community of scholars cooperatively engaged in transdisciplinary research addressing the grand challenges of modern society and supporting the intellectual growth of students and colleagues.

Our mission is to benefit society through excellence in education, use-inspired research from basic to translational, and leadership in service to the profession and community. We seek to provide a supportive environment that promotes creativity, diversity, multidisciplinary teaming, scholarship, and ethical behavior to advance knowledge and practice in computing, information and decision technologies to enhance society.

ASU prohibits all forms of discrimination, harassment and retaliation. To view ASU's policy please see <https://www.asu.edu/aad/manuals/acd/acd401.html>.

Title IX protects individuals from discrimination based on sex in any educational program or activity operated by recipients of federal financial assistance. As required by Title IX, ASU does not discriminate on the basis of sex in the education programs or activities that we operate, including in admission and employment. Inquiries concerning the application of Title IX may be referred to the Title IX Coordinator or to the U.S. Department of Education, Assistant Secretary, or both. Contact [titleixcoordinator@asu.edu](mailto:titleixcoordinator@asu.edu) or 480-965-0696 for more information. Office located at 1120 S. Cady Mall, INTDSB 284. For information on making a report please go to [www.asu.edu/reportit/](http://www.asu.edu/reportit/).

## **II. Objective of the handbook**

The purpose of this handbook is to provide guidance and information related to admission, degree requirements, and general policies and procedures. Please note that in some cases, you will find differences between the Graduate College policies and procedures and the computer science program requirements. In these cases, CSE has established higher standards. Students must satisfy both sets of requirements. Please note that policies and procedures are occasionally amended to improve the program. Changes will be communicated to students through e-mail,

which is our primary form of communication. We will also post any updates to this handbook on our website [scai.engineering.asu.edu](http://scai.engineering.asu.edu).

### III. Student responsibility and resources

All students are expected to become familiar with university and program policies and procedures and abide by the terms set forth. Information is available online. Most importantly, you should visit the following websites:

- a. The Office of Graduate College – <http://graduate.asu.edu>
- b. Graduate College Policies and Procedures – <https://graduate.asu.edu/policies-procedures>
- c. The Computer Science Program – <https://scai.engineering.asu.edu/graduate-computer-science/>
- d. The International Student and Scholars Center– <https://issc.asu.edu/>, if applicable.
- e. The Ira A. Fulton Schools of Engineering – <http://engineering.asu.edu>
- f. [Wellness Resources](#) - We believe graduate education provides an opportunity to grow in our knowledge and expertise, and during our studies, we may face challenges and hardships that can affect our wellbeing. The Graduate College and the ASU Graduate Student Association have put together resources and best practices guides to help your educational journey. [Graduate Wellness Resources](#)” – a one-page guide to Financial, Social, Emotional, and Physical Health and Wellness Resources for ASU Graduate Students, developed by the GPSA
- g. Should you need additional guidance and support, we encourage you to contact a graduate advisor at the SCAI Graduate Advising Office.
- h. [“10 Best Practices in Graduate Student Wellbeing”](#) – proven ways to help graduate students better care for themselves under the increasing demands of graduate school.

### V. Faculty responsibility

The members of the faculty of computer science have diverse backgrounds and knowledge. They are available to assist you in your plan of study and your educational and career goals. We encourage you to take the opportunity to make individual appointments with faculty members with whom you have common interests. Please refer to the list of the faculty names, areas of expertise, and research interest on [SCAI Website](#).

### VI. Admission and eligibility to the MCS degree programs

The Master of Computer Science (MCS) degree requires a background in engineering, math, sciences, or closely related fields. However, in some cases, students with non-traditional educational backgrounds will be considered for admission. These students may be required to take foundational courses to better prepare for the graduate coursework. A student is encouraged to contact the School of Computing and Augmented Information, Advising Office, CenterPoint Suite 105 to obtain advice on their educational pursuits.

**Eligibility** - Before applying to the MCS program, students are required to have completed two semesters or 6 credit hours of calculus, equivalent to Calculus I and II.

**Application** - All students are required to submit an application, and all required supporting materials with the [Office of Graduate Admission](#) and pay the required fee to have their application reviewed and processed.

**Application deadlines** –

To receive full consideration, we ask that you have all the required documents submitted by the deadline.

Location	Fall	Spring	Summer
On-Campus	December 1	August 1	N/A
Online A/C session	July 20 International July 6	December 11 International Nov 27	April 18 International April 4
Online B session	September 13 International Aug 30	February 12 International Jan 29	N/A

**GRE scores** –GRE scores are optional, but they are strongly recommended for Tempe campus applicants for consideration to multiple programs within the Ira A. Fulton Schools of Engineering. The average GRE scores for students admitted into the MCS program have been: verbal 153 or 63rd percentile, quantitative 163 or 88th percentile, and analytical 4.0. However, admission decisions are made based on the entire application packet. We do not require specific subject GRE scores. The ASU institution code is 4007. If department code is required, use 0000 for GRE.

**English Proficiency** - The University requires all international applicants from a country whose native language is not English to provide the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IETLS) scores. CSE uses average scores of 575 (paper-based) or 90 (internet-based) for TOEFL, 7 for IETLS, 65 for Pearson, or 115 for Duolingo for admission. Note that your application will not be processed until the university receives official TOEFL scores, which are valid two years from the start date of the degree program. There are some exceptions for students who have been living in the United States and would like to have the TOEFL waived. They should consult the [English Proficiency website](#). Please address all TOEFL questions with the Office of Graduate Admission. The ASU institution code is 4007. If department code is required, use 99 for TOEFL.

**Personal statement or curriculum vitae** - The application must include a personal statement or a curriculum vitae. The statement should explain professional goals and reasons for desiring to enroll in the MCS program. A curriculum vitae should highlight the applicant's accomplishments. Include job history, certificates, professional affiliations, and relevant extracurricular activities.

**GPA requirement** - To be considered for the MCS program, we require a minimum cumulative GPA of 3.0 **in the last 60 credit hours of the undergraduate degree** (3.25 GPA strongly recommended for Tempe campus applicants).

**Application evaluation** - Several factors are taken into consideration when evaluating a student's application: the student's cumulative GPA, major, institution, GRE scores (Tempe campus), personal statement (Tempe and for online if submitted), and performance in individual courses.

**Notice of Admission** - CSE submits its recommendation to the Office of Graduate Admission, who will then send the final notice of admission to the applicant in writing via email. You may check your application status on My ASU (my.asu.edu).

**Admission Deferrals** - Students may, with the recommendation of the degree program, defer their initial start semester and year of admission to one semester. Requests for deferrals must be submitted by the start of the term of original admission. Students who miss the deferral deadlines have the option to submit a petition for an enrollment exception for the original admit term.

**Deficiencies** - Students in the MCS programs are admitted from a variety of backgrounds. To ensure that all students have an adequate background in computer science at the undergraduate level, all students need to show competence in 5 areas: computer organization, operating systems, programming languages, algorithms and data structures, and the theory of computation. Many students meet this requirement by taking courses in these areas in their undergraduate years. Students who have not taken equivalent of these courses may be assigned deficiencies in these courses upon admission. Assigned deficiencies must be completed with a grade of C or higher in their first year in the program.

Below is a list of prerequisite courses, along with the associated ASU course numbers:

- CSE 230 - Computer Organization and Assembly Language Programming
- CSE 310 - Data Structures and Algorithms **or** SER 222 Design and Analysis of Data Structures and Algorithms (for online students)
- CSE 330 - Operating Systems **or** SER 334 Operating Systems and Systems Programming (for online students)
- CSE 340 - Principles of Programming Languages **or**  
CSE 355 - Introduction to Theoretical Computer Science

Deficiency coursework completed with a grade of "C" or better will satisfy the requirements. A grade of "C" or better is required for all assigned deficiency coursework at the post-baccalaureate level.

Students have three options to meet the assigned deficiency: Waiver process, Test-out exam, or enrolling in the course and passing with a grade of "C" or better. Deficiencies must be completed within a year of starting the program.

**Option 1: Waiver Process:** Students wishing to have their course syllabi examined as evidence that deficiencies have been satisfied must submit a petition. The request will need to be submitted using the [Petition for Reevaluation of Deficiency Course](#) form along with supporting documents such as a syllabus, catalog description, and university transcripts (including the grade scale), to prove that you have met the requirements. Be advised that the documents you uploaded during the admission application have been

evaluated, so a reevaluation petition should only be submitted if you have **new** information to provide. Once the petition has been reviewed, it is final. There will be no future petition or consideration request. If, after evaluation, the petition is not approved, the student may choose to take the deficiency test-out examination.

**Option 2: Deficiency test-out exam** - An online course proficiency examination (CPE) is provided to allow students entering with deficiencies (listed in the admission letter) to take a test to establish whether they possess basic knowledge of the course material sufficient to have an assigned deficiency waived. The cost for each subject examination is \$59, payable at the time of registration. Students have a maximum of two attempts for each subject.

**Below is the testing period which needs to be completed depending on the start of the semester admitted, is the only opportunity for deficiency test-outs. No other arrangements will be made for students to test out of assigned deficiencies.**

<u>Session Admitted*</u>	<u>Exam Deadline^</u>
Fall Session A/C	Before the start of Spring session A/C
Fall Session B	Before the start of Spring session B
Spring Session A/C	Before the start of Summer session C
Spring Session B	Before the start of Fall session A
Summer Session C	Before the start of Fall session B

**Option 3:** Enrolling in the course. Students who could not clear their assigned deficiency through the waiver process or deficiency test-out exam are required to enroll and pass the course(s) in their first year. A student has a total of two attempts to clear the deficiency. Students assigned CSE 340 have the option of enrolling CSE 340 or CSE 355. For CSE 340/355 two attempts are combined and not a total of four attempts – CSE 340 (twice) and CSE 355 (twice).

### **Pre-admission credits and Transfer Credit**

The CSE Program allows a student to transfer a maximum of six (6) credit hours of graduate coursework from another accredited institution. The graduate-level credit hours course must have grades of “B” or better and must not have been not used toward a previous degree, per Graduate College policy. Pre-admission credits must be taken within three years of admission to the ASU degree program to be accepted. A course with a grade of “Pass”, “Credit”, or “Satisfactory” is not acceptable for transfer. If coursework older than 3 years from the admission term of a new program is being applied towards the program as pre-admission coursework, the maximum time limit may be updated to reflect the start date of the pre-admission coursework. A student who wishes to transfer credits from another institution should contact a graduate advisor in the SCAI Advising Center to initiate the transfer credit process. Acceptance of transfer credit is at the discretion of the CSE Program. See the Pre-Admission Credit section of the [Graduate](#)



[College Policies and Procedures Manual](#) for more details. Approved transfer credit cannot count towards meeting the core requirement unless the credit was earned at ASU.

### **Transfer between programs**

A student who would like to change from a Ph.D. to a Master's or change Master's degree programs within Computer Science (adding, removing, or changing concentrations) should follow the [Computer Science Degree Change process](#). With approval, eligible credit hours can be transferred into the Master's program with grades of "B" or better within the last three years. Likewise, an MCS online student who would like to switch to the MS Tempe campus must meet all the admission requirements and, with approval, may transfer credit hours with grades of "B" or better on courses taken within the last three years.

**Note:** Online students changing from online campus to a ground campus program will be required to submit a new application for admission. Students changing from the MCS Tempe campus to MCS Online should consult with an Academic Advisor before submitting a request.

Students who want to change from a Master's to a Ph.D. in Computer Science must submit a new application to ASU Graduate Admissions. Admission to the Ph.D. program is not guaranteed. If admitted, the student is allowed to transfer only 12 credits of courses taken within the last three years with grades of "B" or better from the original uncompleted master's program to the new program. More than 12 credits require the CS Graduate Program Chair and the Dissertation Chair or co-chairs approval. Otherwise, a petition is needed. Students should familiarize themselves with the Graduate College pre-admission transfer policy.

## **VII. MCS Degree Requirements**

Degree requirements for the MCS include a minimum of 30 semester hours, not including deficiency courses and CSE 584 – CPT credits

The MCS is comprised of three major milestones, which all students are required to complete successfully before graduation:

- a) Completion of coursework
- b) Filing an approved plan of study
- c) Successful completion of a project portfolio

**An accelerated computer science degree (4+1) program** BS-BSE/MS program is available for ASU undergraduate in computer science, computer systems engineering, and software engineering students. There are also concentrations available in Cybersecurity and Big Data Systems. The accelerated program allows a maximum of 9 credit hours to be shared with both their undergraduate and graduate programs and 3 credit hours reserved in the undergrad to be applied for the graduate program between the undergraduate and graduate programs. Students interested in the MCS Online program should consult with their Academic Advisor.

**Satisfactory Progress as an incoming Accelerated Graduate Student:** All students must maintain a GPA of 3.0 or higher (Cumulative, Graduate, and IPOS). If a student falls below a 3.0 GPA, they are placed on probation and provided the timeframe in which the GPA must be raised to the satisfactory level. Students who do not raise their GPA to a 3.0 within the provided

timeline risk dismissal from the program. Note: any 500 level courses taken as an undergraduate student will immediately count towards your satisfactory progress GPA calculation once you become a graduate student.

#### **a. Formulation of the Plan of Study**

*A student needs to submit a plan of study (iPOS) through MyASU before the end of their first semester of attendance.* The final iPOS is subject to approval by the Graduate Program Chair. After approval at the School level, the iPOS is forwarded to the Graduate College for final approval.

The iPOS must contain a minimum of 30 semester hours of approved graduate-level work. **At least 24 of these hours must be CSE-5XX credits at ASU.** A maximum of 6 credit hours of 400-level coursework may be allowed on the iPOS per Graduate College guidelines. All 30 semester hours must be from formal course work (including CSE 591, 594, and 598). CSE 590 will not be allowed as part of the MCS program. Students need to be mindful of course antirequisites at the time of registration. **Specifically, students may not take and count both CSE 450/551 or CSE 511/512 or IEE 520/CSE 572 as these courses are classified as antirequisites in the academic catalog due to significant overlap between the courses.**

In addition to meeting the requirements specified above, all MCS students must complete a project portfolio from two courses in which the student received a "B" (3.00) grade or higher.

All MCS students must take and pass at least three credit hours in each of the three core courses: Foundations, Systems, and Applications. **Transfer credit cannot count towards meeting the core area requirement unless the credit was earned at ASU** (course lists available at: <https://scai.engineering.asu.edu/graduate-computer-science/> ).

**Approved 400 and 4XX/5XX level:** A maximum of 6 credit hours of 400-level coursework is allowed. A maximum of 12 hours of a combination of 400-level and cross-listed courses (4XX/5XX) is allowed. If a 400-level course is cross-listed with a 500-level course, students will be required to enroll in the 500-level. (CSE 4XX course lists available at: <https://scai.engineering.asu.edu/graduate-computer-science/> ).

Non-CSE pre-fix courses outside the unit require the Program Chair's approval before enrolling it to count towards the degree requirement. What is not allowed for non-CSE 5XX electives:

1. A graduate course from another program which is similar to or is a subset of an undergraduate course in Computer Science.
2. A graduate course from another program which substantially overlaps ( more than 30%) with a course that they have taken or are planning to take.

If you are asking about a course from another program that sounds similar to a course that you have taken or are planning to take, then please submit the syllabus of both and an explanation why you think the overlap is less than 30%.

**MCS in Computer Science** (*available online and on-campus*)

The program requires the following: 30 credit hours and a portfolio.

Required Core Courses: 9 credit hours

- Foundations (3)
- Systems (3)
- Applications (3)

Elective Courses: 21 credit hours

Students choose 21 credit hours of other elective coursework approved in their plan of study. Coursework selected as part of the core may not be used as elective coursework on the same study plan.

Culminating Experience: Project Portfolio, 0 credit hours

**MCS in Computer Science (Cybersecurity)** (*available online and on-campus*)

The program requires the following: 30 credit hours and a portfolio.

- Required Core Courses: 9 credit hours
- Foundations (3)
- Systems (3)
- Applications (3)

Required Concentration Courses\*: 9 credit hours of coursework in Cybersecurity.  
3 credit hours from:

- CSE 543 Information Assurance and Security (3)

And 6 credit hours from two the following courses:

- CSE 539 Applied Cryptography (3)
- CSE 545 Software Security (3)
- CSE 548 Advanced Computer Network Security (3)

Electives: 12 credit hours

\*If a student selects any of the concentration courses that are also listed as a core course, additional coursework may be required to complete the degree. Students should check with their academic advisor to ensure that the total credit hours of their plan of study is equal to 30.

Culminating Experience: Project Portfolio, 0 credit hours

**MCS in Computer Science (Big Data Systems)** (*available online and on-campus*)

The program requires the following: 30 credit hours and a portfolio.

Required Core Courses: 9 credit hours)

- Foundations (3)
- Systems (3)
- Applications (3)

Required Concentration Courses\*: 9 credit hours

- CSE 511 Data Processing at Scale (3)
- CSE 575 Statistical Machine Learning (3)
- CSE 578 Data Visualization (3)

Restricted Electives: 6 credit hours from the following

- CSE 572 Data Mining (3) or IEE 520 Statistical Learning for Data Mining (3) (ground campus only)
- CSE 598 Engineering Blockchain Applications (3)
- CSE 594 Spatial Data Science and Engineering (3) (ground campus only)

Electives: 6 credit hours\*

\* If a student selects any of the concentration courses that are also listed as a core course, additional coursework may be required to complete the degree. Students should check with their academic advisor to ensure that the total credit hours of their plan of study is equal to 30.

Culminating Experience: Project Portfolio, 0 credit hours

**Project Portfolio**

All students admitted to the MCS degree program must complete a [project portfolio](#). The portfolio is a compilation of two completed projects that were finished in two MCS program CSE 5XX courses with a grade of B. Students must write a portfolio report that includes the highlights of the two projects. All CSE 500-level regular courses are eligible for the portfolio if project work makes up at least 30% of the final grade. At the course instructor's discretion, this may consist of one or multiple projects, or a combination of project and self-study work. For students pursuing a concentration, one of the two projects must be from the concentration courses or the restricted electives for the concentration. **The student must have received a final grade of “B” or better in the course to use it for their portfolio.**

**VIII. General Information, Policies and Procedures****a. Financial assistance and/or fellowships**

There are limited funds for MS thesis and PhD students. We encourage students to pursue assistantships outside of CSE and not limit their search to only CSE. Information regarding other sources of financial assistance is available on the following websites:

- Financial aid: <https://students.asu.edu/financialaid>
- Graduate College: <https://graduate.asu.edu/pay-for-college>
- Fulton: <https://graduate.engineering.asu.edu/fellowships/>

**b. Continuous Enrollment**

Once admitted to a graduate degree program or graduate certificate program, students must be registered for a minimum of one credit hour during all phases of their Graduate career, including the term in which they graduate. This includes periods when students are engaged in research, working on or defending theses, or in any other way utilizing university resources, facilities, or faculty time.

Registration for every fall semester and spring semester is required. Summer registration is required for students taking examinations, completing culminating experiences, defending theses, or graduating from the degree program.

To maintain continuous enrollment, the credit hour(s) must:

- Appear on the student's Plan of Study, OR
- Be continuing registration (595, 795), OR
- Be a graduate-level course
- Be a deficiency course that is listed on the student's admit letter.

Grades of "W" and/or "X" are not considered valid registration for continuous enrollment purposes. "W" grades are received when students officially withdraw from a course after the add/drop period. "X" grades are received for audit courses. Additionally, students completing work for a course in which they received a grade of "I" must maintain continuous enrollment as defined previously. Graduate students have one year to complete work for an incomplete grade; if the work is not completed, and the grade changed within one year, the "I" grade becomes permanent. Additional information regarding incomplete grades can be found at <http://asu.edu/aad/manuals/ssm/ssm203-09.html>.

Medical/Compassionate Withdrawal: There are appropriate circumstances when students may need to withdraw from the university (i.e., medical withdrawal, compassionate leave). The policies for such withdrawals are the same for both undergraduate and graduate students. An approved Medical/Compassionate Complete Withdrawal is valid towards meeting the continuous enrollment policy.

### c. Leave of Absence Policies

Graduate students planning to discontinue registration for a semester or more must submit a Leave of Absence request via their Interactive Plan of Study (iPOS). **Requests should have enough detail to fully understand the situation and steps you should take so that you can continue in the next semester.** This request must be submitted and approved **before** the anticipated semester of non-registration. Students may request a maximum of two semesters of leave during their entire program.

Having an approved Leave of Absence by the Graduate College will enable students to re-enter their program without re-applying to the university. **Students who do not register for a fall or spring semester without an approved request are considered withdrawn from the university under the assumption that they have decided to discontinue their program.** Students removed for this reason may re-apply for admission to resume their degree program. The application will be considered along with all other new applications to the degree program.

A student with a Graduate College approved Leave of Absence is not required to pay tuition and/or fees, but in turn, are not permitted to place any demands on university faculty or use any university resources. These resources include university libraries, laboratories, recreation facilities, or faculty time.

**d. Maximum Time Limit**

Master's students must complete all program requirements within six years. The six-year period starts with the semester and year of admission to the Master's program. Graduate courses taken before admission that are included in the Plan of Study must have been completed within three years of the semester and year of admission to the program. If coursework completed over 3 years ago is being applied towards a degree program as pre-admission coursework, the maximum time limit may be updated to reflect the start date of the pre-admission coursework.

Any exceptions must be approved by the supervisory committee and the Graduate College Dean. The Graduate College may withdraw students who are unable to complete all degree requirements and graduate within the allowed maximum time limits.

**e. Maximum Credit Load**

SCAI students on the Tempe campus are limited to a maximum of 11 credit hours per semester, unless they hold an RA/TA position. After the first semester, students in good academic standing may submit an overload request for permission to enroll in 12 credit hours. The 12 credits are the maximum allowed credit enrollment for SCAI graduate students.

SCAI students attending online are limited to 6 credits per session (12 credits per semester). After the first semester, students in good academic standing may submit an overload request for permission to enroll in more than 6 credit hours in a session. These requests will be reviewed on a case-by-case basis and are subject to approval.

**f. Registration requirements for research assistants (RA) and teaching assistants (TA)**

Students awarded an assistantship within the **Ira A. Fulton Schools of Engineering are required to be registered for 12 credit hours**. Audit credit hours do not count toward the 12 credit hours.

Students who obtain an assistantship outside the Ira A. Fulton Schools of Engineering are required to be enrolled in a minimum of 6 credit hours. Audit credits do not count towards the 6 credit hours. Enrollment in 1 continuing credit registration (CSE 595) does count toward the 6-hour requirement.

TAs and RAs are treated as residents for tuition purposes. To be eligible for tuition remission, TAs and RAs must be employed a minimum of 10 hours per week (25 percent Full-Time Equivalency {FTE}). TAs/RAs working 10-19 hours per week (25-49 percent FTE) receive a 50 percent remission of tuition for the semester or summer session of their employment. TAs/RAs working 20 hours per week (50 percent FTE) do not pay tuition during the semester or summer session of their employment. Also, the university pays the individual health insurance premium for those TAs and RAs working 20 hours per week (50 percent FTE). The TA/RA offer does not cover additional fees beyond tuition.

The university provides an award covering the premium for individual health insurance for teaching and research assistants/associates who meet the minimum eligibility requirements during the duration of their appointment (coverage periods are August 16– January 15 and January 16–August 15). These are:

- appointment at 50% time (20 hours per week)
- hired as a TA or RA no later than the end of the eighth week of classes of the semester.

There are four ways a student can fulfill the TA English language requirement. Any of the following will fulfill the language requirement:

1. Take and pass the SPEAK test with a score of 55 or higher. Only SPEAK scores from Global Launch are allowed.
2. Take the iBT (Internet-based TOEFL) test and receive a score of 26 or higher on the oral portion of the test.
3. Take the IELTS test and receive a score of 8 or higher on the speaking portion of the test.
4. Complete the ITA Teacher Training Course with a score of ‘certified.’

### **g. Policy for Maintaining Academic Satisfactory Progress**

At the end of the student’s first completed semester and every semester thereafter, the school will conduct an audit to determine if the student is maintaining the required minimum satisfactory progress, including progress on academic (GPAs and deficiencies) and probationary issues. Any student that is not in compliance with the satisfactory academic/progress requirements is notified that she/he is either

- on academic probation and is given the next 9 credit hours or two semesters (fall and spring) to bring the GPA up to the proper level or
- on continued progress probation and is required to meet the conditions outlined in the continued probation letter.

Failure to properly remediate the GPA or the conditions outlined in the letter within the time frame will result in the school recommending that the student be dismissed from the program.

**Note:** Fully admitted students who take optional summer courses are placed on probation after the summer term if the earned grade(s) causes their GPA to fall below the satisfactory progress GPA minimum.

If applicable, the above-noted audit will also review each student’s progress towards removing enrollment deficiency courses and/or any other degree requirement milestone(s). Failure to satisfactorily complete all deficiency course(s) and/or required milestones by the stipulated deadline may result in a recommendation for dismissal to the Graduate College.

Each semester, the computer science program reviews students’ files for satisfactory progress toward completion of the degree. All students who fall in one of the four categories are placed on probation or withdrawn from the program:

- 1) Satisfactory progress;
- 2) Academic probation;

- 3) Progress probation;
- 4) Withdrawal from the CSE program.

1. **Satisfactory progress** means that a student does not have any academic or progress probationary issues.

## 2. Academic Probation

A student who has been admitted to a graduate degree program in SCAI with either regular or provisional admission status must maintain a grade point average (GPA) of 3.0:

1. in all work taken for graduate credit (courses numbered 500 or higher)
2. in the coursework on the student's approved iPOS (interactive plan of study)
3. in all coursework taken at ASU (overall cumulative GPA) post-baccalaureate
4. Have a grade below "C" in their deficiency course (s).

A student will be placed on academic probation if one or more of the student's GPAs listed above falls below 3.0 after all grades have been posted for the semester. Students will be notified by e-mail when placed on academic probation.

- A student will achieve good academic standing by obtaining a 3.0 or better in the GPAs listed above by the time the next nine graduate hours are completed. A maximum of two semesters is allowed to complete the nine hours of graduate-level coursework to raise the GPA, whichever comes first. Hence, it is strongly recommended students focus on improving their grades and meeting deficiency requirements.

3. **Progress probation** pertains to issues dealing with making progress toward a degree. The following are notices/letters you will receive if one of these pertains to your academics:

- Lack of progress toward completing deficiencies as listed in your admission letter.
- Failure to complete the project portfolio.
- Failure to submit an iPOS by the end of the 1<sup>st</sup> semester.
- Students who chose to take graduate coursework and not enroll in deficiency courses will be subject to dismissal.

## 4. Withdrawal from the CSE program:

An MCS student may be removed from the program for any of the reasons listed above.

A student is recommended for withdrawal from the CSE program if she or he fails to meet the probationary standards placed in the semester mentioned in the probationary letter. The student will receive a letter from the computer science program explaining the reasons for the withdrawal. The student will have **5 calendar days** from the date of the letter to appeal the decision. The CSE Graduate Program Committee (GPC) will review



the case and will make the necessary recommendation. The graduate program chair, on behalf of the GPC, will provide a written explanation of the outcome. If the outcome is favorable, the student will have to meet all the outlined requirements at the end of the specified period. The student will be required to sign an agreement acknowledging the recommendations and the consequences if the terms of the agreement are not met. If the GPC recommends that the appeal is not granted in favor of the student, the graduate program chair, on behalf of the GPC, will recommend to the Dean's Office to withdraw the student from the CSE program. The student's appeal will be forwarded to the Ira A. Fulton Schools Standards Committee, which reviews the student's case and makes the final ruling to the Associate Dean and the CSE program. If the appeal is not granted in favor of the student, the Dean's Office of Academic and Student Affairs will recommend to the Graduate College to withdraw the student from the CSE program. Please refer to the Graduate College policies and procedures or contact a graduate advisor in the SCAI Advising Center.

#### **h. Filing for Graduation**

During the final semester, a student must file an application for graduation with the Graduation Office of the Registrar through My ASU. The student's approved final plan of study (iPOS) must be on file with Graduate College before the student can apply for graduation.

#### **i. Academic Integrity**

The highest standards of academic integrity are expected of all graduate students, both in the academic coursework and in their related research activities. The failure of any graduate student to meet these standards may result in serious consequences, including suspension or expulsion from the university and/or other sanctions as specified in the academic integrity policies of individual schools, as well as the university.

Violations of academic integrity include but are not limited to cheating, fabrication, tampering, plagiarism, or aiding or facilitating such activities. At the graduate level, students are expected to be familiar with these issues, and each student must take personal responsibility for their work. In addition, graduate students are expected to follow university guidelines related to the Student Code of Conduct. University policies related to academic integrity and code of conduct are available in the Office of the University Provost or at <https://provost.asu.edu/academic-integrity>. Students also should be aware of Ira A. Fulton Schools resources related to academic integrity: <https://engineering.asu.edu/integrity/>

Furthermore, use of AI tools without proper citation is deemed to be in violation of Academic Integrity. According to Association for Computing Machinery (ACM). "The use of generative AI tools and technologies to create content is permitted but must be fully disclosed in the Work. For example, the authors could include the following statement in the Acknowledgements section of the Work: ChatGPT was utilized to generate sections of this Work, including text, tables, graphs, code, data, citations, etc.). If you are uncertain about the need to disclose the use of a particular tool, err on the side of caution, and include a disclosure in the acknowledgements section of the Work."

## j. CSE 584 Internship

Curricular Practical Training (CPT) is an academic experience usually obtained at off-campus work settings, allowing the student to apply knowledge and skills gained in various classes. It is intended as a unique, hands-on learning experience to provide students with a number of valuable skills that they can use upon graduation from their degree programs. Accordingly, it is not available to full-time or part-time workers regularly employed by the company where the internship is proposed. CPT is only available for students enrolled in the Tempe campus program.

All students (domestic and international) may take part in an out-of-state internship during the summer session. The eligibility requirements for CPT internships remain the same as mentioned.

International students must work with the International Students and Scholars Center (ISSC) and submit additional documentation to obtain work authorization. Students desiring to do CPT must include the CPT course CSE 584 (1 credit hour) as an integral part of their program of study, reflected by their approved iPOS. The addition of CPT credit(s) should be done at the initial submission of the student's iPOS. SCAI recommends listing 3 individual CSE 584 (1 credit hour) courses in the iPOS. The Internship course cannot be added to an approved iPOS once all coursework has been completed. Approval of an iPOS with CSE 584 credit confirms that the internship is an integral part of the degree requirements as planned by the student. An internship that is not part of the educational plan can be removed from iPOS. Note: Only internship courses can be removed from the iPOS. Courses that are approved as part of the overall degree program in the iPOS can only be replaced with other approved coursework.

To be eligible for an internship, a student must be in **good academic standing (cumulative, graduate, and iPOS GPA of 3.0 or above)**.

### Summer:

- Students can participate in an out-of-state or an in-state internship, full-time or part-time in the summer semester if ALL of their GPA's (graduate, iPOS, and CUM GPA) are at least 2.5.

### Fall/spring semesters:

- Students with a GPA of 3.0-3.24 may participate in an in-state internship, part-time. **Campus presence is required.**
- Students with a GPA of 3.25 or higher may participate in an in-state or out-of-state internship, full or part-time. **Campus presence is required.**

Full-time is 21 hours more. Part-time is 20 hours or less.

Students doing CPT in their last semester: the end date is the last day of finals (Fall/Spring) or last day of class (Summer).

During the regular fall and spring semesters, international graduate students on F-1 status must register for a minimum of nine (9) credit hours to maintain full-time status - of which six (6) credit hours must be in-person, on-campus coursework at the ASU Tempe campus. Three (3) credit hours of online coursework are permitted. The CSE 580 practicum course will not satisfy the student's "physical presence" at ASU.

Required documents and forms for the internship proposal must be submitted online at least four weeks before the beginning of the semester in which the internship is planned. Students will not be able to request late-add registration of the CSE 584 Internship credit to their class schedule after each semester's add/drop deadline. Students will be asked to enroll in the next session within the term.

An approved application is required before commencing the internship. The request will include a statement from the employer that indicates they understand the work is to satisfy a degree requirement. A sample letter and other required forms are available on the SCAI [CPT website](#).

**Reneg:** (verb) to fail to carry out a promise or commitment

It is unethical for students to continue to seek or consider other employment opportunities once an offer has been accepted. SCAI expects students to honor an acceptance and withdraw from all employment-seeking activities. Students who accept an offer from an organization and later renege/decline the offer will be prohibited from requesting future CPT pending a meeting with the Associate Director.

**A five-page final report is required** at the end of the internship before a grade is given. The final report must be submitted to the reporting supervisor (Industry Mentor) for comments and then to the faculty advisor for grade assignment. Students do not need a faculty mentor signature. Refer to the SCAI [CPT website](#) for guidelines for preparing the final report.

**k. Engineering Student Organizations**

There are dozens of engineering student organizations and teams ranging from honors and professional associations to groups creating underwater robots, concrete canoes, and launching rockets. Student organizations are excellent opportunities to learn about career possibilities as many of the student groups operate in conjunction with industry professional societies... get involved today! Please visit <http://studentorgs.engineering.asu.edu/> for a list of Engineering Student Organization.

**l. Instructional Concerns and Course-Related Complaints**

Being part of a large university creates opportunities to learn from a diverse instructor population with different teaching styles and modalities for delivering course content. Courses are offered by a diverse set of faculty, including those whose primary responsibility is teaching, GSA/TA instructional staff, and part-time faculty who are working in the field. Based on enrollment or modality of offering, faculty may also be supported by graduate student teaching assistants, GSAs, and graders. This diverse higher education delivery platform may differ significantly from previous experiences, and while it provides an

opportunity to expand the student's ability to learn and develop problem-solving skills, concerns and conflicts with requirements and instructors may occasionally arise. SCAI students with instructional concerns should review and adhere to the following guidelines for attempting to resolve their issues. First and foremost, keep in mind that the faculty and advising staff are experienced, dedicated educators that are here to help you achieve your educational goals. At the same time, they have a responsibility to ensure standards are maintained and student outcomes are achieved before graduation. The university culture recognizes the value of diversity in multiple dimensions and the presumption of expertise and academic freedom of the faculty.

### **Communicate with your Instructor.**

If you have a difference of opinion with your instructor, teaching assistant (TA) or graduate support assistant (GSA), or have concerns about technical or administrative aspects of the course, visit the instructor or TA/GSA during office hours or contact them via email (if you cannot visit them during the office hours). Express your concerns clearly and respectfully and ask for help. Be sure to provide concise information about what you have trouble understanding in the course or your concern. Instructors and GSA or TAs are here to help. Remember that you are responsible for prerequisite knowledge/skills required for a course and regularly studying the material taught in the course. The teaching staff may not be able to help you with your problem if you lack the prerequisite knowledge/skills or have not been keeping up with the course material. As a guideline, for a 15-week course, you should spend three hours study time every week for each hour of course credit. Thus, you should schedule 8-10 hours each week to devote to each three-credit course. For a 7.5-week course, students should be prepared to spend 6 hours a week on coursework for every 1-course credit. So, you should expect to spend approximately 18 hours a week on coursework for a three-credit course. Also, make sure to resolve the issues as soon as they occur and maintain all documentation. For example, if the assignment instructions are not clear, get the clarification on the day the assignment is assigned and do not wait until the assignment's deadline.

If you are still having problems in the course after communicating with your instructor, TA or GSA, connect with your academic advisor to understand your options moving forward.

### **Connect with your CSE Graduate Program Chair**

If you are unable to resolve the concern after initial contact with the instructor, GSA, or TA, and you have met with your academic advisor, you should then contact the program chair for your degree (or the department offering the course). The program chair will confer with the instructor and/or GSA/TA to better understand the concern and try to resolve the problem. Please note that before meeting with the program chair, you should have made a reasonable effort to meet with the course instructor (not just the support GSA or TA) and get the issue resolved. When contacting the program chair, provide all the relevant details such as the course syllabus, assignment handout, email exchange with the instructor, etc. so that the program chair can promptly act on your concerns. Please be brief and precise in the description of your concerns. In some cases, the graduate program chair would like to meet you. When coming for the meeting, bring along all the relevant documents.

If the instructional concern is not resolved with the program chair or the department offering the course, contact the Associate Dean of Academic Affairs Office for the college offering the course for assistance through the grade grievance process

<https://engineering.asu.edu/grade-grievance/>.

### **Remain Focused**

When faced with instructional concerns, it is important to remain focused on the rest of the course while addressing specific areas that are under review. Be sure to stay connected with your academic advisor if there are any changes in your situation.

### **NOTE:**

- Misrepresentation of facts or disrespectful behavior when confronting your instructor or teaching assistant is considered an academic integrity violation.
- Maintain all documentation.
- Act proactively and promptly.

### **In Summary, Guidelines for Avoiding Problems:**

- Be sure you have the necessary prerequisite knowledge before starting a course;
- Attend class and online exercises regularly;
- Devote time each week to studying to avoid falling behind;
- Contact the TA (if assigned) or instructor during office hours at first sign of trouble and come prepared to ask precise questions and to explain your difficulty;
- Accept the fact that you grow intellectually and professionally by being challenged and learning to deal with diverse expectations and environments.

### **Process for Resolving Conflicts in Grading, Course Expectations, etc.:**

- Contact the TA (if available) or instructor to explain your concern and seek resolution.
- If the TA/instructor has attempted to assist you, but you are still having an academic difficulty that is causing personal stress or hindering your academic success, see your Academic Advisor.
- If the TA/instructor is not responsive or does not provide a legitimate response/accommodation, then contact your graduate program chair.
- If you still feel there is a legal, ethical, or procedural violation that is victimizing you, contact the Office of the Associate Dean of Engineering for Academic Affairs.
- Circumventing this process will be considered a violation of professional ethics and protocol.