

**New Undergraduate Program (Majors, Minors, Sequences) Proposal  
Illinois State University - University Curriculum Committee**

**Program Department** School of Information Technology

**Initiator** Traci Carte

**Phone** 438-8338

**Initiator Department** School of Information Technology

**Coauthor(s)** Mary Califf (mccaliff@ilstu.edu)

**Title of New Program** General Computer Science Accelerated

**Submission Date** Wednesday, October 5, 2022

**Email** tacart3@ilstu.edu

**Campus Address** 5150 Information Technology

**Version** 2 **ID** 385

**Proposed Starting Catalog Year** 2023-2024

**Associated Course Proposal(s):**

New Graduate Course proposal IT 440 titled *Introduction to Artificial Intelligence*

New Graduate Course proposal IT 456 titled *Introduction to Computer Graphics*

New Graduate Course proposal IT 482 titled *Distributed Systems*

New Graduate Course proposal IT 487 titled *Parallel Processing*

**1. Proposed Action**

New Major

**Major CIP Code** 11.0701

New Minor

✓ New Sequence

More than 50% of courses in this program are Distance Education

**Sequence Major**

Computer Science

**2. Provide Undergraduate Catalog copy for new program.**

## General Computer Science Accelerated Sequence

This sequence allows students to take up to 12 hours of approved graduate courses that will count for both the undergraduate and graduate program in Computer Science thus allowing high-achieving students the opportunity to complete their bachelor's degree and master's degree faster than each degree alone. Students admitted into this sequence can then apply to the Master of Science in Computer Science (MSCS) in the spring of their senior year. Enrollment in the Accelerated Sequence does not guarantee final admission into the School of IT MSCS program. Admission is limited and is based on space availability and the competitiveness of the applicant pool.

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Degree offered: B.S.

Minimum required credit hours: 83

- COM 223
- ENG 249
- IT 168
- IT 179
- IT 180
- IT 191
- IT 214
- IT 225
- IT 261
- IT 279
- IT 326 or IT 426
- IT 327
- IT 328 or IT 428
- IT 378
- IT 383
- IT 386
- IT 398 (6 credit hours)
- MAT 145
- MAT 146
- MAT 260

Take 9 credit hours from the following

At least 6 of the 9 credit hours must be from courses with an asterisk

- IT 244
- IT 276
- IT 329\* or IT 429\*
- IT 340\* or IT 440\*
- IT 330
- IT 340
- IT 343\* or IT 443\*
- IT 348\* or IT 448\*
- IT 351
- IT 352\* or IT 452\*
- IT 353
- IT 355\*
- IT 356\* or IT 456\*
- IT 367
- IT 382\* or IT 482\*
- IT 385
- IT 388\* or IT 487\*
- IT 444
- IT 458
- IT 467
- IT 478
- IT 488
- IT 497

Take 1 of the following (3 or 4 credit hours)

- MAT 350
- MQM 100

Take 2 courses (8 credit hours) from the following lab science courses

- BSC 196
- BSC 197
- CHE 140
- CHE 141
- PHY 110
- PHY 111

Notes

- Acceptable substitution for 3 hours of IT 398 is 3 hours of IT 391

- Acceptable substitution for 6 hours of IT 398 is 3 hours of IT 391 and 3 additional hours from IT 244, IT 276, IT 330, IT 340/IT 440, IT 351, IT 353, IT 355, IT 356/IT 456, IT 367, IT 382/IT 482, IT 385, IT 388/IT 487, IT 444, IT 458, IT 467, IT 478, IT 488, IT 497 (if not used to satisfy other requirements)
- High achieving students with a cumulative GPA of 3.20 or higher may apply to the accelerated sequence two years before completion of their undergraduate degree. To graduate in this sequence, a student must take at least one course for graduate credit. This sequence allows students to take up to 12 hours of approved graduate courses that will count for both the undergraduate and graduate program in General Computer Science. Students can then apply to the Computer Science graduate program in the spring of their senior year. Enrollment in the Accelerated Sequence does not guarantee final admission into the Computer Science graduate program.

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**3. Provide a description for the proposed program.**

The Accelerated General Computer Science Sequence is a pathway into the Master's Program in Computer Science. Accelerated degree programs offer high-achieving students the opportunity to complete their bachelor's degree and master's degree faster than each degree alone. Students accepted into the sequence will be allowed to take graduate courses during their junior and senior years that will count towards both the undergraduate and graduate programs in computer science. Qualifying students must apply to the accelerated program in the Spring semester of their sophomore year. If accepted, the Accelerated General Computer Sciences student will take up to 12 hours of graduate-level credits during their junior and senior year. Students must then apply formally to the Graduate School in the spring of their senior year. Accelerated General Computer Science students taking graduate courses must follow all policies and guidelines set forth in the Graduate Catalog pertaining to their performance and progress toward the degree.

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**4. Provide a rationale of proposed program.**

Accelerated master's degree programs offer high achieving students the opportunity to complete their bachelor's degree and master's degree faster than both degrees alone. Students will take both graduate and undergraduate classes during their junior and senior years and seamlessly transition into the master's degree program as long as they remain eligible for graduate study. This allows our program to both attract and retain high achieving students through both degrees. A separate sequence must be created in order to track students and which graduate courses can substitute for undergraduate courses. No changes are being made to the original undergraduate sequence beyond course substitutions.

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**5. Describe the expected effects of the proposed program on existing campus programs (if applicable).**

No effects are expected

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**6. Provide a sample four-year plan of study that fulfills the following requirements:** 120 hours, 42 senior college hours (200 and 300 level courses), and 39 General Education Program hours or 36 hours with exemption. If the program is a BS program, show the BS-SMT degree requirement. If the program is from CAS, show Foreign Language Requirement (LAN 111/LAN 112). Confirm General Education requirement exemptions on the General Education page of the current Academic Catalog. *4-year plans are not required for minor program proposals.*

**First Year****Fall Semester (14 credit hours)**

ENG 101 or COM 110 (General Education) (3)  
 IT 168 (4)  
 MAT 145 (General Education) (4)  
 General Education Course (3)

**Spring Semester (14 credit hours)**

ENG 101 or COM 110 (General Education) (3)  
 IT 179 (3)  
 IT 191 (1)  
 MAT 146 (B.S. – SMT course) (4)  
 General Education Course (3)

**Year 2****Fall Semester (15 credit hours)**

IT 180 (1)  
 IT 225 (3)  
 IT 261 (3)  
 Lab Science course (General Education) (4)  
 MAT 260 (4)

**Spring semester (16 credit hours)**

IT 214 (3)  
 IT 279 (3)  
 MQM 100 (3)  
 Lab Science course (General Education) (4)  
 General Education course (3)

**Year 3****Fall semester (15 credit hours)**

IT 327 (3)  
 IT 386 (3)  
 ENG 249 (3)  
 University-wide elective (3)  
 General Education course (3)

**Spring Semester (15 credit hours)**

IT 378 (3)  
 IT 383 (3)  
 IT major elective (3)  
 COM 223 (3)  
 General Education course (3)

**Year 4****Fall Semester (12 credit hours)**

IT 328 (3) or IT 428 (3)  
 IT major elective (3)  
 AMALI course or University-wide elective (3)  
 General Education course (3)

**Spring Semester (13 credit hours)**

IT 326 (3) or IT 426 (3)  
 IT major elective (3)  
 University-wide electives (3)  
 University-wide electives (4)

**Notes:**

IT 398 (6) may also be taken the summer before the fourth year.

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**7. Describe the expected curricular changes required, including new courses. If proposals for new courses have also been submitted, please reference those related proposals here:**

No new courses are needed. Previously used 300-level courses are being concurrently proposed with this request to fulfill graduate school requirements to create 400-level courses to replace previously slash-listed courses.

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**8. Anticipated funding needs and source of funds.**

No anticipated funding needs

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**9. No Does this program count for teacher education?**

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10. **No** Is this an Interdisciplinary Studies program?

11. **The following questions must be answered.**

**No** Have you confirmed that Milner Library has sufficient resources for the proposed program?

Explain why Milner Library has not been contacted.

No new needs are anticipated

**No** Are more than 120 hours required to complete a degree with this major?

**No** Beyond General Education, does the major require more than 66 semester hours?

**No** Does this sequence (if in a major) require more than 55 semester hours of courses in the major department/school?

**No** Does this program stipulate specific general education courses offered in the major department/school as a part of the major requirements only if such courses serve as prerequisites for other courses required by the major?

**Yes** Does this program stipulate specific course requirements (majors/sequences only) that also satisfy general education and/or IAI requirements?

Please specify those courses below.

MAT 145, Calculus I

**No** Is the proposed program intended to be longer than four years (as indicated by the plan of study)?

**N.A.** Have letter(s) of concurrence from affected departments/schools been obtained?  
*A departments/school is affected if it has a program with significant overlap or if it teaches a required or elective course in the program.*

12. **Routing and action summary for New Program:**

**1. School of Information Technology Department Curriculum Committee Chair**

Elahe Javadi (website)

Signature

Elahe Javadi

Print

9/6/2022 11:07:58 PM

Date

**2. School of Information Technology Department Chair/School Director**

Traci Carte (website)

Signature

Traci Carte

Print

9/7/2022 8:44:48 AM

Date

**3. College of Applied Science and Technology College Curriculum Committee Chair**

Elizabeth Sattler (website)

Signature

Elizabeth Sattler

Print

10/7/2022 11:29:51 AM

Date

**4. College of Applied Science and Technology College Dean**

Cara Rabe-Hemp (website)

Signature

Cara Rabe-Hemp

Print

10/10/2022 2:54:00 PM

Date

**5. University Curriculum Committee Chair**

Mary Califf (website)

Signature

Mary Califf

Print

11/21/2022 3:38:06 PM

Date

All new programs (majors, minors, sequences) are routed by the U.C.C. to the Academic Senate

**Comments**

**Comments from Version 1 from Elizabeth Sattler ( College Curriculum Committee Chair):**

CCC approved pending the following changes:

- Section 2; clarify how many credit hours. On the proposal it says 83, but Lane counted 84.
- Section 2; IT 384 is not found in course finder. Believes this should be IT 348, need to be updated to correct course number.
- Section 6, clarify that IT 398 (6) is an internship.