# http://www.ric.edu/webcommunications/images/SealWithText_Small_Black.pngUNDERGRADUATE CURRICULUM COMMITTEE (UCC)PROPOSAL FORM

## **Cover page** scroll over blue text to see further important [instructions](#instructions): [if not working select “COMMents on rollover” in your Word preferences under view] **please read these.**

**N.B. ALL numbered categories in section (A) must be completed. Please do not use highlight to select choices within a category but simply delete the options that do not apply to your proposal (e.g. in A.2 if this is a course revision proposal, just delete the creation and deletion options and the various program ones, so it reads “course revision”) Do not delete any of the numbered categories—if they do not apply leave them blank. If there are no resources impacted, please put “none” in each A. 7 category.**

|  |  |  |
| --- | --- | --- |
| A.1. [Course or program](#Proposal) | **Computer science b.S.** |  |
| [Replacing](#Ifapplicable)  |  |
| A. 1b. Academic unit | **School of Business** |  |
| A.2. [Proposal type](#type) | **Program:** [**revision**](#revision)**Course deletion—in program listing only.** |  |
| A.3. [Originator](#Originator) | **Qian Liu** | [Home department](#home_dept) | **Computer Science and Information Systems** |
| A.4. [Context and Rationale](#Rationale) Must include additional information listed in smart tip for all [new programs](#type). If **online** course or program, you need to explain what mode(s) you plan to use and why you need that specific delivery.  | **The Computer Science and Information Systems (CSIS) department is proposing to change its CS BS program as listed below:**1. **move CSCI 402 (Cyber Security Principles) to required course section: CS is no longer just about building software; it is also about securing it. Cyber Security threats are becoming more sophisticated, and CS graduates need to be prepared to address them. By including CSCI 402 in the required CS course section, students can gain the knowledge and skills they need to address those challenges in the real world. Additionally, Cyber Security skills are in high demand across various industry, by graduating with an understanding of Cyber Security principles, CS students will be well-positioned for success in the job market. Finally, integrating CSCI 402 into CS required course section can help students develop a deeper understanding of computer system and networks, including their vulnerabilities and how to protect them. This knowledge is valuable to CS students.**
2. **move CSCI 309 (Object-Oriented Design) to elective course section: a substantial portion of the materials covered in CSCI 309 is also covered in CSCI 211 and CSCI 212W.**
3. **delete elective courses that have not been offered for years (each deleted course has a separate UCC form)**
4. **add newly merged elective courses (CIS416, CIS421, and CIS455W—which have revised prerequisites so there will be no hidden prerequisites) and CSCI 432 - Network and Systems Security (which contains useful materials following on from the CSCI 402) as an additional elective to provide students with a comprehensive selection across various current areas.**
5. **Note on the catalog copy that CSCI 422 was deleted as a program elective in the B**A **and the BS program as this was still there in error, that course was deleted from the catalog a while back but had been missed in the program description.**
 |
| A.5. [Student impact](#student_impact)Must include to explain why this change is being made? | **Students will benefit in the following ways after this proposed program change:*** **competitive skills and increased expertise**
* **broader spectrum of program elective course fields**
* **clearer academic advising report**
 |
| A.6. [Impact on other programs](#impact)  | **None** |
| A.7. [Resource impact](#Resource) | [*Faculty PT & FT*](#faculty):  | **None** |
| [*Library*:](#library) | **None** |
| *Technology* | **None** |
| [*Facilities*](#facilities): | **None** |
| A.8. [Semester effective](#Semester_effective) | **Fall 2024** | A.9. [Rationale if sooner than next Fall](#Semester_effective) |  |
| A.10. INSTRUCTIONS FOR CATALOG COPY: Use the Word copy versions of the catalog sections found on the UCC Forms and Information page. Cut and paste into a single file **ALL the relevant pages from the college catalog that need to be changed.** Use tracked changes feature to show how the catalog will be revised as you type in the revisions. If totally new copy, indicate where it should go in the catalog. If making related proposals a single catalog copy that includes all changes is preferred. Send catalog copy as a separate single Word file along with this form. |
| A.11. List here (with the relevant urls), any RIC website pages that will need to be updated (to which your department does not have access) if this proposal is approved, with an explanation as to what needs to be revised: |
| A. 12 **Check to see if your proposal will impact any of our** [**transfer** **agreements,**](file:///Users/SAbbotson/Documents/Curriculum/ManualandWebsite/transfer%20agreements) **and if it does explain in what way. Please indicate clearly what will need to be updated, including any changes in prefix numbers/titles for TES.** |
| A. 13 Check the section that lists “Possible NECHE considerations” on the UCC Forms and Information page and if any apply, indicate what that might be here and contact Institutional Research for further guidance. |

**E.** [**Program Proposals**](#program_proposals) **For IN-Person or mixed modalities (for fully online programs: see section F):**

### **Complete only what is relevant to your proposal. Delete section E. if not needed. PLease add in the 2020 CIP number for MAJOR revisions or new programs in E 2; these can be found at** [**https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=56**](https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=56) **consult with Institutional research to be sure you select the correct one.**

|  | [Old (for revisions only)](#old_program) | New/revised |
| --- | --- | --- |
| E.1. [Enrollments](#enrollments) Must be completed. | **84** |  |
| E. 2. [2020 CIP number](#CIPnumber" \o "THESE CAN BE FOUND AT HTTPS://NCES.ED.GOV/IPEDS/CIPCODE/BROWSE.ASPX?Y=56 CONSULT WITH INSTITUTIONAL RESEARCH TO BE SURE YOU SELECT THE CORRECT ONE.) | **11.0701** |  |
| E.3. [Admission requirements](#admissions) |  |  |
| E.4. [Retention requirements](#retention) |  |  |
| E.5. [Course requirements](#course_reqs) for each program option. Show the course requirements for the whole program here. | Highlights show the changes (deletion and addition):Required CoursesCSCI 209 Discrete Structures Using Python (4)CSCI 211 Computer Programming and Design (4) CSCI 212W Data Structures (4) CSCI 309 Object-Oriented Design (4)CSCI 313 Computer Organization and Architecture (4) CSCI 325 Organization of Programming Language (3)CSCI 401W Software Engineering (3)CSCI 423 Analysis of Algorithms (4)CSCI 435 Operating Systems (4)THREE COURSES fromCSCI 305 Functional Programming (4)orCSCI 402 Cyber Security Principles (4) orCSCI 416 Web Design (4)CSCI 415 Software Testing (4)CSCI 422 Introduction to Computation Theory (4)CSCI 427 Introduction to Artificial Intelligence (3) CSCI 428 Machine Learning (4)CSCI 437 Network Architectures and Programming (4)CSCI 455 Introduction to Databases (4)CSCI 467 Computer Science Internship (4)CSCI 476 Advanced Topics in Computer Science (4)CognatesENGL 230W Workplace Writing (4)or ENGL 231W Multimodal Writing (4) MATH 212 Calculus I (4) MATH 213 Calculus II (4)PHIL 206 Ethics (3)orPHIL 207 Technology and the Future of Humanity (3)TWO COURSES fromMATH 240 Statistical Methods I (4)MATH 300W Bridge to Advanced Mathematics (4)MATH 314 Calculus III (4)MATH 324 College Geometry (4)MATH 417 Introduction to Numerical Analysis (4)MATH 418 Introduction to Operations Research (3)MATH 431 Number Theory (3)MATH 436 Discrete Mathematics (3)MATH 445 Advanced Statistical Methods (4) ONE OF THE FOLLOWING TWO-COURSE SEQUENCESBIOL 111 Introductory Biology I (4)andBIOL 112 Introductory Biology II (4) orCHEM 103 General Chemistry I (4) andCHEM 104 General Chemistry II (4)orPHYS 101 Physics for Science and Mathematics I (4)andPHYS 102 Physics for Science and Mathematics II (4) | Highlights show the changes (deletion and addition):Required CoursesCSCI 209 Programming Implementations using Discrete Structures (4)CSCI 211 Computer Programming and Design (4) CSCI 212W Data Structures (4) CSCI 313 Computer Organization and Architecture (4) CSCI 325 Organization of Programming Language (3)CSCI 401W Software Engineering (3)CSCI 402 Cyber Security Principles (4)CSCI 423 Analysis of Algorithms (4)CSCI 435 Operating Systems (4)THREE COURSES fromCIS 416 Web Design (4)CIS 421 Networks and Infrastructure (4)CIS 455W Database Programming (4)CSCI 309 Object-Oriented Design (4)CSCI 415 Software Testing (4)CSCI 427 Artificial Intelligence Foundations (4) CSCI 428 Machine Learning (4)CSCI 432 Network and Systems Security (4)CSCI 467 Computer Science Internship (4)CSCI 476 Advanced Topics in Computer Science (4)CognatesENGL 230W Workplace Writing (4)or ENGL 231W Multimodal Writing (4) MATH 212 Calculus I (4) MATH 213 Calculus II (4)PHIL 206 Ethics (3)orPHIL 207 Technology and the Future of Humanity (3)TWO COURSES fromMATH 240 Statistical Methods I (4)MATH 300W Bridge to Advanced Mathematics (4)MATH 314 Calculus III (4)MATH 324 College Geometry (4)MATH 417 Introduction to Numerical Analysis (4)MATH 418 Introduction to Operations Research (3)MATH 431 Number Theory (3)MATH 436 Discrete Mathematics (3)MATH 445 Advanced Statistical Methods (4) ONE OF THE FOLLOWING TWO-COURSE SEQUENCESBIOL 111 Introductory Biology I (4)andBIOL 112 Introductory Biology II (4) orCHEM 103 General Chemistry I (4) andCHEM 104 General Chemistry II (4)orPHYS 101 Physics for Science and Mathematics I (4)andPHYS 102 Physics for Science and Mathematics II (4) |
| E.6. [Credit count](#credit_count) for each program option | **75-78** | **75-77** |
| E.7. Note any needs for program accreditation (if relevant).  |  |  |
| E.8 Program modality. Online percentage of delivery; calculate % within required hybrids and the total for the program cannot go over 49%  | **in-person and****mixed courses types (51% in person)** | **in-person and****mixed courses types (51% in person)** |
| E.9 Will any classes be offered at sites other than RIC campus or the RI Nursing Ed. Center?\* | **NO** | **NO** |
| E. 10. Do these revisions reflect more than 25% change to the [program?\*](file:///Users/sabbotson/Documents/Curriculum/Program%20goals)  | **NO** | **NO** |
| E.11. [Program goals](file:///Users/sabbotson/Documents/Curriculum/Program%20goals)Needed for all new programs |  |  |
| E.12. Other changes if any |  |  |

\* If answered YES to either of these questions will need to inform Institutional Research and get their acknowledgement on the signature page.

**G. Signatures**

* **Changes that affect General Education in any way MUST be approved by ALL Deans and COGE Chair**.
* Changes that directly impact more than one department/program MUST have the signatures of all relevant department chairs, program directors, and their relevant dean (e.g. when creating/revising a program using courses from other departments/programs). Check UCC manual 4.2 for further guidelines on whether the signatures need to be approval or acknowledgement.
* Proposals that do not have appropriate approval signatures will not be considered.
* Type in name of person signing and their position/affiliation.
* Send electronic files of this proposal and accompanying catalog copy to curriculum@ric.edu to the current Chair of UCC. Check UCC website for due dates. **Do NOT convert to a .pdf.**

##### G.1. Approvals: required from programs/departments/deans who originate the proposal. THESE may include multiple departments, e.g., for joint/interdisciplinary proposals.

| Name | Position/affiliation | [Signature](#_Signature" \o "Insert electronic signature, if available, in this column) | Date |
| --- | --- | --- | --- |
| Suzanne Mello-Stark | Chair of CSIS department | \*approved by email | 2/22/24 |
| Marianne Raimondo | Dean of School of Business | \*approved by email | 2/22/24 |

##### G.2. [Acknowledgements](#acknowledge): REQUIRED from OTHER PROGRAMS/DEPARTMENTS (and their relevant deans if not already included above) that are IMPACTED BY THE PROPOSAL. SIGNATURE DOES NOT INDICATE APPROVAL, ONLY AWARENESS THAT THE PROPOSAL IS BEING