# 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. DO NOT USE HIGHLIGHT, where choices are given within categories, please DELETE those THAT DO NOT APPLY TO YOUR PROPOSAL. Do not delete numbered categories.**

**ALL numbers in section (A) to be completed, including the impact ones (#5-7), put “none” if that is the case.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A.1. [Course or program](#Proposal) | **CSCI 401 SOFTWARE ENGINEERING** | | | |  |
| [Replacing](#Ifapplicable) |  | | | |
| A.2. [Proposal type](#type) | **Course: revision** | | | |
| A.3. [Originator](#Originator) | **Robert Ravenscroft**  **Namita Sarawagi** | [Home department](#home_dept) | **MATHEMATICS AND COMPUTER SCIENCE** | | |
| A.4. [Context and Rationale](#Rationale) | **Changes in Pre-requisites for CSCI 401 – Software Engineering**  In the **CSCI 401 – Software Engineering** course, students work collaboratively in teams to create an application, from the design phase all the way to final test and deployment. This process emulates current software engineering practices in industry, and the team project is a significant achievement that provides an important aspect for students to highlight when they apply for jobs after graduation.  This course is best taken by students in their last two semesters, after they have developed a comprehensive set of skills in software design and programming. However, the current pre-requisite for this course is **CSCI 212 Data Structures**, which students can take as early as the first semester of their sophomore year. This allows students to take **CSCI 401** sooner than we would like them to, and can result in students enrolling in the Software Engineering course before they are fully capable of meeting the demands entailed by this advanced course.  We are introducing a new required course **CSCI 309 – Object-Oriented Design**, which places an emphasis on the concepts and patterns of object-oriented design and on how to apply those concepts when programming. After taking this course, students will have enhanced their competence in design and programming skills and will be better prepared for upper level courses such as CSCI 401 – Software Engineering.  **We propose to add CSCI 309 as a pre-requisite to CSCI 401.** Furthermore, we propose an additional requirement that students must take CSCI 401 only after they have had **2 additional courses at the 300 level or higher**, to ensure that they will have the background and maturity necessary to succeed in CSCI 401. | | | | |
| A.5. [Student impact](#student_impact) | Students will have enhanced their competence in design and programming skills and will be better prepared for taking CSCI 401 – Software Engineering. Students will graduate better prepared for employment in industry. | | | | |
| A.6. [Impact on other programs](#impact) | **CIS** – In the restricted electives for the BS in CIS students can taketwo additional courses in computer information systems or **computer science** at the 300-level or above | | | | |
| A.7. [Resource impact](#Resource) | [*Faculty PT & FT*](#faculty): | **Existing faculty teach this course** | | | |
| [*Library*:](#library) | **No additional resources needed** | | | |
| [*Technology*](#technology) | **Continue to teach in the existing computer labs using existing software** | | | |
| [*Facilities*](#facilities): | **None** | | | |
| A.8. [Semester effective](#Semester_effective) | **FALL 2020** | A.9. [Rationale if sooner than next Fall](#Semester_effective) | |  | |
| A.10. INSTRUCTIONS FOR CATALOG COPY: This single file copy must include ALL relevant pages from the college catalog, and show how the catalog will be revised. (1) Go to the “Forms and Information” page on the UCC website. Scroll down until you see the Word files for the current catalog. (2) Download ALL catalog sections relevant for this proposal, including course descriptions and/or other affected programs. (3) Place ALL relevant catalog copy into a single file. Put page breaks between sections and **delete any catalog pages not relevant for this proposal**. (4) Using the track changes function, revise the catalog pages to demonstrate what the information should look like in next year’s catalog. (5) Check the revised catalog pages against the proposal form, especially making sure that program totals are correct if adding/deleting course credits. If new copy, indicate where it should go in the catalog. If making related proposals a single catalog copy that includes all is acceptable. Send as a separate single file along with this form. | | | | | |

B. [NEW OR REVISED COURSES](#delete_if)  **DO NOT use highlight. Do not delete numbered categories, just leave blank if they do not apply. Delete this whole page if the proposal does not include a new or revised course. Always fill in b. 1 and B. 3 for context.**

|  | Old ([for revisions only](#Revisions)) ONLY include information that is being revised, otherwise leave blank. | New Examples are provided within some of the boxes for guidance, delete just the examples that do not apply. |
| --- | --- | --- |
| B.1. [Course prefix and number](#cours_title) | **CSCI 401** | **CSCI 401** |
| B.2. Cross listing number if any |  |  |
| B.3. [Course title](#title) | **SOFTWARE ENGINEERING** | **SOFTWARE ENGINEERING** |
| B.4. [Course description](#description) |  |  |
| B.5. [Prerequisite(s)](#prereqs) | **CSCI 212 or CSCI 315, or consent of department chair** | **CSCI 212 or CSCI 315, CSCI 309** **and at least two additional computer science courses at the 300-level or above, or consent of department chair** |
| B.6. [Offered](#Offered) |  |  |
| B.7. [Contact hours](#contacthours) |  |  |
| B.8. [Credit hours](#credits) |  |  |
| B.9. [Justify differences if any](#differences) |  | |
| B.10. [Grading system](#grading) |  |  |
| B.11. [Instructional methods](#instr_methods) |  |  |
| B.12.[Categories](#required) |  |  |
| B.13. Is this an Honors course? |  |  |
| B.14. [General Education](#ge)  N.B. Connections must include at least 50% Standard Classroom instruction. |  |  |
| B.15. [How will student performance be evaluated?](#performance) |  |  |
| B.16 [Recommended class-size](#class_size" \o "Check appendix XVIII in the UCC Manual for Best Practices) |  |  |
| B.17. [Redundancy statement](#competing) |  |  |
| B. 18. Other changes, if any |  | |

| B.18**.** [**Course learning outcomes**](#outcomes)**: List each one in a separate row** | [**Professional Org.Standard(s)**](#standards)**, if relevant** | [**How will each outcome be measured**](#measured)**?** |
| --- | --- | --- |
|  |  | Click Tab from here to add rows |

| B.19. [**Topical outline**](#outline)**: DO NOT INSERT WHOLE SYLLABUS, JUST A TWO-TIER TOPIC OUTLINE. Proposals that ignore this request will be returned for revision.** |
| --- |
| 1. Topic 1    1. Subtopic 1a    2. Subtopic 1b etc. |

D. 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](mailto:curriculum@ric.edu) and a printed signature copy of this whole form to the current Chair of UCC. Check UCC website for due dates.

##### D.1. Approvals: required from programs/departments/deans who originate the proposal. 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 |
| --- | --- | --- | --- |
| Stephanie Costa | Chair, Mathematics and Computer Science |  |  |
| Earl Simson | Dean, Arts and Sciences |  |  |

##### D.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 SUBMITTED. CONCERNS SHOULD BE BROUGHT TO THE UCC COMMITTEE MEETING FOR DISCUSSION; all faculty are welcome to attend.

| Name | Position/affiliation | [Signature](#Signature_2) | Date |
| --- | --- | --- | --- |
| Lisa Bain | Chair, Accounting and Computer Information Systems |  |  |
| Jeffrey Mello | Dean, School of Business |  |  |