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

## Cover page roll over blue text to see further important [instructions](#instructions): please read.

**N.B. DO NOT USE HIGHLIGHT, JUST DELETE THE WORDS THAT DO NOT APPLY TO YOUR PROPOSAL**

**ALL numbers in section (A) need to be completed, including the impact ones.**

|  |  |  |
| --- | --- | --- |
| A.1. [Course or program](#Proposal) | **Data Science minor** |  |
| [Replacing](#Ifapplicable)  |  |  |
| A.2. [Proposal type](#type) | **Program:** [**creation**](#creation) |  |
| A.3. [Originator](#Originator) | Lisa Bain & Kyungsub Choi | [Home department](#home_dept) | SOM - ACCT & CIS Dept |
| A.4. [Rationale](#Rationale) | 1. The CS4RI initiative by Governor Raimondo has a goal of increasing the number of RI residents with technical skills and this includes establishing new CS-related minors at colleges and universities throughout the state. Representatives from Commerce RI have met with faculty and administration at RIC to help identify new minors that would promote and support CS4RI. The new Data Science Minor was identified as a one of these new minors that would provide additional technical skills in the state and complement the current offerings at RIC. 2. The Data Science field one of the fasting growing sectors of the IT industry. There are many organizations requiring this skill and other institutions offering minors, bachelors and graduate studies in this area. 3. This minor will be used to establish the foundation for a future graduate program/certificate in Data Science. 4. Two new CIS courses will be created to support the new Data Science minor. These course will be available as restricted CIS electives to existing CIS majors/minors, as electives to SOM majors, and electives to all majors. |
| **A.5.** [**Date submitted**](#date_submitted) | Jan 27, 2017 |  A.6. [Semester effective](#Semester_effective) | Fall 2017 |
| A.7. [Resource impact](#Resource) | *[Faculty PT & FT](#faculty" \o "Need to hire new full-time or part-time faculty? This is where you indicate if this proposal will be affecting FLH in your department/program.)*:  | Current MATH and CIS faculty will teach courses in the minor, including two new CIS courses.  |
|  | [*Library*:](#library) | No additional library resources needed. |
|  | [*Technology*](#technology) | No additional technology resources will be needed. Any software requirements will be coordinated with USS, installed in the dedicated Alger 104 networking lab, or provided directly to the students. |
|  | [*Facilities*](#facilities): | The CIS courses that are part of the minor will use the existing classrooms and computers labs. |
| A.8. [Program impact](#prog_impact) | CIS and MATH (Due to a prerequisite of the two new courses that are part of the minor.  |
| A.9. [Student impact](#student_impact) | Students will have additional opportunities to build credentials and skill sets that will improve their marketability to future employers.  |
| A.10. The following screen tips are for information on what to do about catalog copy until the new CMS is in place; check the “Forms and Information” page for updates. [Catalog page.](#catalog)  [Where are the catalog pages](#catalog)? [Several related proposals](#catalog)? Do **not** list catalog pages here. **All** catalog copy for a proposal must be contained within a **single** file; put page breaks between sections. Make sure affected program totals are correct if adding/deleting course credits. |

### C. [Program Proposals](#program_proposals) **complete only what is relevant to your proposal Delete this whole page if the proposal is not revising, creating, deleting or suspending any progam.**

|  | [Old (for revisions only)](#old_program) | New/revised |
| --- | --- | --- |
| C.1. [Context](#summary) |  | The new minor is designed for current RIC students. It is primarily structured for CIS and other business majors but is designed to accommodate students in any major at the college. The Data Science field has applications across almost all disciplines and is not limited to just the business fields.The new minor will be used to establish the foundation for a future graduate program/certificate in Data Science. This will attract new students, working professionals, and other enrollments from outside of the college.  |
| C.2. [Enrollments](#enrollments) |  | Estimated 5-10 students per semester |
| C.3. [Admission requirements](#admissions) |  | There are no additional admissions requirements. Any RIC student in good standing will be eligible to add the Data Science Minor. |
| C.4. [Retention requirements](#retention) |  | There are no additional retention requirements. The new Data Science Minor will use the retention requirements set by the college.  |
| C.5. [Course requirements](#course_reqs) for each program option |  | * CIS 352 Management Information Systems - 3 Cr
* MATH 177 Quantitative Business Analysis - 4 Cr
* MATH 248 Business Statistics - 4 Cr
* CIS 470/570 Introduction to Data Science (NEW) - 4 Cr
* CIS 472/572 Data Visualization (NEW) - 4 Cr
 |
| C.6. [Credit count](#credit_count) |  | 19 |
| C.7. Other changes if any |  |  |
| C.8 [Program goals](Program%20goals)Needed for all new programs |  | This new Data Science Minor would support the current Program Goals of the B.S. in CIS.Graduates will understand the roles of information systems in organizations and be able to utilize these systems for organizational process improvements.Graduates will be able to develop information systems, which achieve the goals of the organization while identifying and evaluating sourcing alternatives.  Graduates will understand and be able to address the information requirements of organizations, including data security and risk management.  Graduates will understand the opportunities created by technology innovations and how these impact organizations.Graduates will understand the design and management of the enterprise architecture and infrastructure.  Graduates will have a basic level of competency in programming, logic skills, and computer literacy. |

## D. Signatures

##### D.1. Approvals

* 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 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 and a printed or electronic signature copy of this form to the current Chair of UCC. Check UCC website for due dates.

| Name | Position/affiliation | [Signature](#_Signature" \o "Insert electronic signature, if available, in this column) | Date |
| --- | --- | --- | --- |
| Jane Przybyla | Chair of Acct and CIS Dept |  |  |
| Jeff Mello | Dean of School of Management |  |  |

##### D.2. [Acknowledgements](#acknowledge)

| Name | Position/affiliation | [Signature](#Signature_2) | Date |
| --- | --- | --- | --- |
| Christopher Teixeira | Chair of Math and CS Dept |  |  |
|  |  |  |  |
|  |  |  | Tab to add rows |