# 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. 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 ever delete any of the numbered categories—if they do not apply leave them blank. ALL numbered categories in section (A) must be completed. If there are no resources impacted it is okay to put “none” in A. 7**

|  |  |  |
| --- | --- | --- |
| A.1. [Course or program](#Proposal) | **Bachelor of Science in Data Science** |  |
| [Replacing](#Ifapplicable)  |  |
| A. 1b. Academic unit | **Faculty of Arts and Sciences**  |  |
| A.2. [Proposal type](#type) | **Program:** [**revision**](#revision) |  |
| A.3. [Originator](#Originator) | **Mark Medwid** | [Home department](#home_dept) | **Mathematical Sciences** |
| A.4. [Context and Rationale](#Rationale) Note: Must include additional information in smart tip for all [new programs](#type) | **This is a revision to the existing degree program in data science in which we adjust the list of courses that satisfy major requirements. Specifically, we will be allowing students to satisfy one of the major requirements with either MATH 240 (Statistical Methods I) or MATH 248 (Business Statistics I), rather than just MATH 240, as the requirement is currently listed.** **At present, students cannot take both MATH 240 and MATH 248 for credit. The core major course MATH 245 requires either MATH 240 or MATH 248, but MATH 248 had not been listed in the major requirements. Therefore, it is possible that a student having MATH 248 credit would be able to progress through the major program but not technically meet the MATH 240 requirement.****The two courses are distinct in terms of target audience and applications; however, a common goal of the two courses is to cement elementary statistical literacy. As either course can be used as a prerequisite for MATH 245, we see no reason why MATH 248 should not be used to satisfy the MATH 240 requirement for the major.** |
| A.5. [Student impact](#student_impact)Must include to explain why this change is being made? | **This would allow students to fulfill the major requirement for elementary statistics without a formal course substitution. Students who change majors from or have a second major in the School of Business will benefit most from this change, as MATH 248 is required in several majors/minors in the School of Business.** |
| A.6.a. [Impact on other programs](#impact)  | **None** |
| A.6.b. Will this impact [transfer agreements](file:///C%3A%5CUsers%5Cmarkm%5CDownloads%5CCheck%20relevant%20JAAs%2C%202%2B2s%2C%20and%20if%20a%20course%20you%20are%20revising%20or%20deleting%20is%20one%20with%20a%20transfer%20agreement)? Explain how and list what needs to be updated. | **No impact** |
| A.7. [Resource impact](#Resource) | [*Faculty PT & FT*](#faculty):  | **None** |
| [*Library*:](#library) | **None** |
| [*Technology*](#technology) | **None** |
| [*Facilities*](#facilities): | **None** |
| A.8. [Semester effective](#Semester_effective) | **Fall 2022** | 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: |

### C. [Program Proposals](#program_proposals) **complete only what is relevant to your proposal if this is a revision, but include the enrollment numbers for all proposals. Delete section C if the proposal is not revising, creating, deleting or suspending any progam.**

|  | [Old (for revisions only)](#old_program) | New/revised |
| --- | --- | --- |
| C.1. [Enrollments](#enrollments) Must be completed. | **5** | **5** |
| C.2. [Admission requirements](#admissions) |  |  |
| C.3. [Retention requirements](#retention) |  |  |
| C.4. [Course requirements](#course_reqs) for each program option. Show the course requirements for the whole program here. | * **MATH 212 – Calculus I**
* **MATH 213 – Calculus II**
* **MATH 240 – Statistical Methods I**
* **MATH 245 – Principles of Data Science**
* **MATH 314 – Calculus III**
* **MATH 345 – Linear Models for Data Science**
* **MATH 436 – Discrete Mathematics**
* **MATH 441 – Introduction to Probability**
* **MATH 445 – Advanced Statistical Methods**
* **CSCI 157 – Introduction to Algorithmic Thinking in Python**
* **CSCI 428 – Machine Learning**
* **CIS 455W – Database Programming OR CSCI 455 – Introduction to Databases**
* **CIS 470 – Introduction to Data Analytics**
* **CIS 472 – Data Visualization**
* **ENGL 230W – Workplace Writing**
* **PHIL 207 – Technology and the Future of Humanity**
 | * **MATH 212 – Calculus I**
* **MATH 213 – Calculus II**
* **MATH 240 – Statistical Methods I OR MATH 248 – Business Statistics I**
* **MATH 245 – Principles of Data Science**
* **MATH 314 – Calculus III**
* **MATH 345 – Linear Models for Data Science**
* **MATH 436 – Discrete Mathematics**
* **MATH 441 – Introduction to Probability**
* **MATH 445 – Advanced Statistical Methods**
* **CSCI 157 – Introduction to Algorithmic Thinking in Python**
* **CSCI 428 – Machine Learning**
* **CIS 455W – Database Programming OR CSCI 455 – Introduction to Databases**
* **CIS 470 – Introduction to Data Analytics**
* **CIS 472 – Data Visualization**
* **ENGL 230W – Workplace Writing**
* **PHIL 207 – Technology and the Future of Humanity**
 |
| C.5. [Credit count](#credit_count) for each program option |  |  |
| C.6. Program Accreditation (if relevant) |  |  |
| C.7. Other changes if any |  |  |
| C.8. [Program goals](file:///C%3A%5CUsers%5Csabbotson%5CDocuments%5CCurriculum%5CProgram%20goals)Needed for all new programs |  |  |

## 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 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. 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 |
| --- | --- | --- | --- |
| Rebecca Sparks | Chair of the Department of Mathematical Sciences | \*approved by email | 4/12/22 |
| Earl Simson | Dean of the Faculty of Arts and Sciences | Earl Simson | 4/14/22 |

##### 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 |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  | Tab to add rows |