

Rochester INSTITUTE OF TECHNOLOGY

Minor Program proposal form

name of college

**Department of Information Sciences and Technologies**

**Name of Minor:** Applied Informatics

**Brief description of the minor to be used in university publications**

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| Informatics is the study of the collection, storage, analysis, and presentation of digital information. The minor in Applied Informatics is for non-Information Technology students who wish to apply the tools of informatics to the domain of their major or some other domain of their choosing. Upon completion of the minor, students will be able to comfortably analyze, integrate, and present information in an accurate and compelling manner. They will have learned to work with databases, XML, and other data sources. They will be able to apply statistical analysis to data and they will be able to use mashup tools to combine and present data in new ways. |

**1.0 Minor Program Approvals**

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| --- | --- | --- |
|  | Approval request date: | Approval granted date: |
| Academic Unit Curriculum Committee | 3/6/12 | 3/8/12 |
| College Curriculum Committee | 3/16/12 | 3/27/12 |
| Inter-College Curriculum Committee |  |  |

**2.0 Rationale:**

A minor at RIT is a related set of academic courses consisting of no fewer than 15 semester credit hours leading to a formal designation on a student's baccalaureate transcript

How is this set of academic courses related?

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| **These courses consist of courses core to the IT degree bookended by two key informatics courses. The first informatics course sets the tone for the minor and lays down foundational informatics concepts, the IT courses provide basic IT skills, while the finishing informatics course serves as a capstone experience bringing together all the skills learned in the prior five courses.** |

**3.0 Multidisciplinary involvement:**

If this is a multidisciplinary minor spanning two or more academic units, list the units and their role in offering and managing this minor.

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| The minor includes COS-STAT-145 Introduction to Statistics I which is offered by the School of Mathematical Sciences. The Information Sciences and Technology Department will offer the remaining courses and manage the minor. |

**4.0 Students ineligible to pursue this minor:**

The purpose of the minor is both to broaden a student's college education and deepen it in an area outside the student’s major program. A minor may be related to and complement a student’s major, or it may be in a completely different academic/professional area.   It is the responsibility of the academic unit proposing a minor and the unit’s curriculum committee to indicate any home programs for which the minor is not a broadening experience.

Please list below any home programs whose students will not be allowed to pursue this minor, provide the reasoning, and indicate if this exclusion has been discussed with the affected programs:

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| Students in the BS Information Technology degree program are precluded from pursuing this minor because four of this minor’s six required courses also are required courses in the BS IT program. Students in other computing degree programs may be able to take the minor as-is or may need to make course substitutions to account for material already covered in their major. |

**5.0 Minor Program Structure, Sequence and Course Offering Schedule:**

Describe the structure of the proposed minor and list all courses, their anticipated offering schedule, and any prerequisites.

* All minors must contain at least fifteen semester credit hours;
* Minors may be discipline-based or interdisciplinary;
* In most cases, minors shall consist of a minimum of two upper division courses (300 or above) to provide reasonable breadth and depth within the minor;
* As per New York State requirements, courses within the minor must be offered with sufficient frequency to allow students to complete the minor within the same time frame allowed for the completion of the baccalaureate degree;
* Provide a program mask showing how students will complete the minor.

Narrative of Minor Program Structure:

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| Students begin the minor with a course (GCCIS-ISTE-271 Introduction to Informatics) that explains the fundamental principles and tools of informatics. Students are encouraged to think about and apply these principles as they take their remaining courses. They then take introductory programming (GCCIS-ISTE-120-Computational Problem Solving in the Information Domain I) and statistics (COS-STAT-145 Introduction to Statistics I) courses. These courses provide foundational skills and also serve as prerequisites for the next two courses in the minor, Introduction to Database & Data Modeling (GCCIS-ISTE-230) and Data Exploration & Knowledge Discovery (GCCIS-ISTE-270), where students practice higher level skills related to data analysis. Students complete the minor with a capstone course (GCCIS-ISTE-371 Integration in Informatics) where they learn how to integrate disparate data sources and use their complete skillset to develop a project. |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Course Number & Title | SCH | Required | Optional | Fall | Spring | Annual/Biennial | Prerequisites |
| GCCIS-ISTE-271 Introduction to Informatics | 2 | X |  | X |  |  | none |
| GCCIS-ISTE-120 Computational Problem Solving in the Information Domain I | 3 | X |  | X | X |  | none |
| COS-STAT-145 Introduction to Statistics I | 3 | X |  | X | X |  | none |
| GCCIS-ISTE-230 Introduction to Database & Data Modeling | 3 | X |  | X | X |  | GCCIS-ISTE-120 |
| GCCIS-ISTE-270 Data Exploration & Knowledge Discovery | 3 | X |  | X | X |  | COS-STAT-145 |
| GCCIS-ISTE-371 Integration in Informatics | 2 | X |  |  | X |  | GCCIS-ISTE-230, GCCIS-ISTE-270, GCCIS-ISTE-271 |

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| --- | --- |
| Total credit hours: | 16 |

**Minor Course Conversion Table: Quarter Calendar and Semester Calendar Comparison**

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| **Directions: The tables on this page will be used by the registrar’s office to aid student’s transitioning from the quarter calendar to the semester calendar.**  **If this minor existed in the quarter calendar and is being converted to the semester calendar please complete the following tables.**  **If this is a new minor that did not exist under the quarter calendar do not complete the following tables.**  Use the following tables to show minor course comparison in quarter and semester calendar formats. Use courses in the (2011-12) minor mask for this table. Display all required and elective minor courses. If necessary clarify how course sequences in the quarter calendar convert to semesters by either bracketing or using some other notation. |

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| --- | --- |
| Name of Minor in Semester Calendar: | Minor in Applied Informatics |
| Name of Minor in Quarter Calendar: | Minor in Applied Informatics |
| Name of Certifying Academic Unit: | Information Sciences and Technologies Department |

| **QUARTER: Current Minor Courses** | | | **SEMESTER: Converted Minor Courses** | | |  |
| --- | --- | --- | --- | --- | --- | --- |
| Course # | Course Title | QCH | Course # | Course Title | SCH | **Comments** |
| 4002-250 | Introduction to Informatics | 4 | ISTE-271 | Introduction to Informatics | 2 | 4002-250 is being split and enhanced to form two 2-credit courses. |
| 4002-250 | Introduction to Informatics | 4 | ISTE-371 | Integration in Informatics | 2 | 4002-250 is being split and enhanced to form two 2-credit courses. |
| 4002-217 | Programming for Information Technology I | 4 | ISTE-120 | Computational Problem Solving in the Information Domain I | 3 | ISTE-120 consists of all of 4002-217 and half of 4002-218. This is sufficient preparation for the minor. |
| 4002-218 | Programming for Information Technology II | 4 | ISTE-120 | Computational Problem Solving in the Information Domain I | 3 | ISTE-120 consists of all of 4002-217 and half of 4002-218. This is sufficient preparation for the minor. |
| 4002-360 | Introduction to Database and Data Modeling | 4 | ISTE-230 | Introduction to Database and Data Modeling | 3 |  |
| 4002-455 | Needs Assessment | 4 |  |  |  | 4002-455 was optional; has been dropped |
| 4002-425 | HCI 1: Human Factors | 4 | ISTE-271 | Introduction to Informatics | 2 | 4002-425 was optional; relevant portions have been added to ISTE-271. |
|  |  |  | ISTE-270 | Data Exploration & Knowledge Discovery | 3 | New to minor. |

Policy Name: **D1.1 MINORS POLICY**

 1. Definition

A minor at RIT is a related set of academic courses consisting of no fewer than 15 semester credit hours leading to a formal designation on a student's baccalaureate transcript.

The purpose of the minor is both to broaden a student's college education and deepen it in an area outside the student’s major program. A minor may be related to and complement a student’s major, or it may be in a completely different academic/professional area.   It is the responsibility of the academic unit proposing a minor and the unit’s curriculum committee to indicate any home programs for which the minor is not a broadening experience.

In most cases, minors shall consist of a minimum of two upper division courses to provide reasonable breadth and depth within the minor.

2. Institutional parameters

1. Minors may be discipline-based or interdisciplinary;
2. Only matriculated students may enroll in a minor;
3. At least nine semester credit hours of the minor must consist of courses not required by the student's home program;
4. Students may pursue multiple minors.  A minimum of nine semester credit hours must be designated towards each minor; these courses may not be counted towards other minors;
5. The residency requirement for a minor is a minimum of nine semester credit hours consisting of RIT courses (excluding "X" graded courses);
6. Posting of the minor on the student's academic transcript requires a minimum GPA of 2.0 in each of the minor courses;
7. Minors may not be added to the student's academic record after the granting of the bachelor's degree.

3. Development/approval/administration processes

* 1. Minors may be developed by faculty at the departmental, inter-departmental, college, or inter-college level. As part of the minor development process:
     1. students ineligible for the proposed minor will be identified;
     2. prerequisites, if any, will be identified;
  2. Minor proposals must be approved by the appropriate academic unit(s) curriculum committee, and college curriculum committee(s), before being sent to the Inter-College Curriculum Committee (ICC) for final consideration and approval.
  3. The academic unit offering the minor (in the case of interdisciplinary minors, the designated college/department) is responsible for the following:
     1. enrolling students in the minor (as space permits);
     2. monitoring students progress toward completion of the minor;
     3. authorizing the recording of the minor's completion on student's academic records;
     4. granting of transfer credit, credit by exam, credit by experience, course substitutions, and advanced placement;
     5. responding to student requests for removal from the minor.
  4. As per New York State requirements, courses within the minor must be offered with sufficient frequency to allow students to complete the minor within the same time frame allowed for the completion of the baccalaureate degree.

4. Procedures for Minor revision

It is the duty of the college curriculum committee(s) involved with a minor to maintain the program’s structure and coherence.  Once a minor is approved by the ICC, changes to the minor that do not have a significant effect on its focus may be completed with the approval of the involved academic unit(s) and the college curriculum committee(s).  Significant changes in the focus of the minor must be approved by the appropriate academic unit(s) curriculum committee(s), the college curriculum committee(s) and be resubmitted to the ICC for final consideration and approval.