

Rochester INSTITUTE OF TECHNOLOGY

Minor Program proposal form

College of Imaging arts and Sciences

**School of Photographic Arts and Sciences**

**Name of Minor:** CIAS-UG-IMSM-Imaging Systems

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

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| The Minor in Imaging Systems offers you an immersive introduction to the business and technology of photographic imaging services. Pursing this minor will enhance the scope of your undergraduate studies, and increase your career opportunities in the photography and imaging industry to include the options like business management, photo-lab operations, technical support, digital imaging technologist, as well as a sales and technology representive for photo and imaging manufacturers. Some areas of study in this minor are digital imaging capture systems, professional practices, output technologies, color management, and imaging workflows.  |

**1.0 Minor Program Approvals**

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|  | Approval request date: | Approval granted date: |
| Academic Unit Curriculum Committee | December 1, 2011 | January 18, 2012 |
| College Curriculum Committee | April 13, 2012 | April 13, 2012 |
| Inter-College Curriculum Committee | March 6, 2013 | April 1, 2013 |

**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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| The theme of the minor is *Imaging Systems.* It encompasses the technology and the business of imaging ranging from components such as cameras, scanners, monitors, software, image processors, and printers to systems prevalent in the imaging business. Students, primarily those registered in the School of Photographic Arts and Sciences, differentiate themselves in the workplace by their technical and applied knowledge/skills in the photographic industry. RIT’s offering in this area is unique throughout academia. It offers an applied, hands-on perspective on the fast-changing technology in the imaging field. |

**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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| None |

**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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| N/A |

**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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| The minor in Imaging Systems provides experiences in the business and technology of photographic imaging fields. The courses in this minor include investigations of various components found in imaging, the technologies that are used and the practices found in imaging systems that range from the capture of images and up through and not limited by output. The topics include, but are not limited, to digital photographic capture systems and professional practices, photographic output technologies, color management, and imaging workflows. Each student registered in the minor must complete 3 required courses (9 semester credits) from the following list as well as two imaging courses (6 semester credits) of imaging electives also from this list. Alternative electives may be taken if approved by the minor advisor. |

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| Course Number & Title | SCH | Required | Optional | Fall | Spring | Annual/ Bi-annual | Prerequisites |
| IMSM-301 Imaging Systems | 3 | X |  | X |  | A | none |
| IMSM-302 Color Management Technology | 3 | X |  |  | X | A | IMSM-301  |
| IMSM-303 Imaging Workflows | 3 | X |  | X |  | A | IMSM-302  |
| IMPT-322Digital Imaging Processing | 3 |  | X |  | X | A | IMPT-321 |
| IMPT-306e-Sensitometry | 3 |  | X | X |  | A | PHPS-201 |
| IMPT-312High Speed Photography | 3 |  | X | X |  | A | PHPS-202 |
| IMPT-307Survey Non-Conventional Imaging Systems | 3 |  | X |  | X | A | PHPS-202 |
| MAAT-256Principles of Printing | 3 |  | X |  |  | A | none |
| MAAT-206Print and Production Workflow | 3 |  | X |  | X | A | MAAT-106 and MAAT-107 |
| PHFA-361Retouch and Restore | 3 |  | X | X |  | A | PHAR-201 and PHAR-202and PHAR-203and PHAR-204 |
| PHPS-316Scanning Electron Microscopy | 3 |  | X | X | X | A | PHPS-202 |
| PHPS-315Web Publishing | 3 |  | X | X | X | A | PHPS-212 |
| PHPS-306Historic Photographic Processes | 3 |  | X | X |  | A | PHPS-107 |
| PHFA-362The Fine Print Workflow | 3 |  | X |  | X | A | PHAR-201 and PHAR-202and PHAR-203and PHAR-204 |

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| Total required credit hours: | 15 |

**6.0 Course Descriptions as they appear in the course catalog:**

IMSM-301-Imaging Systems
This course will explore the business and technology fundamentals of imaging systems. There will be an emphasis on the operation of devices/components used in imaging systems. Fundamental concepts prevalent in imaging systems such as resolution, dynamic range, sensor architectures, printer and monitor technologies, color spaces, and image processing workflows will be presented. Emphasis will be on the proper selection and underlying principles of these technologies and how to best apply that knowledge to solve problems in the imaging industry. Students will produce a book as a final project showcasing the concepts learned in the course. Potential careers in the imaging industry will be presented throughout the course.

IMSM-302-Color Management Technology
This course, primarily designed for photographers, will provide students with a hands-on experience using software and hardware used in the imaging industry. It has been organized to expose students to managed color from capture to output. The course will review industry standard color instruments and give the essential knowledge and skills required to solve problems prevalent in the photographic field. Critical problem solving of accurate color reproduction across media will be investigated.

IMSM-303-Imaging Workflows
This course will investigate current principles of digital imaging used to solve specific problems in the contemporary imaging field. Highly problematic issues will be investigated as case studies. Students will propose solutions to various problems that might be investigated in a real-world situation. The course will evaluate applications of concepts learned in previous classes and used in a group project creating a catalog or a book. Different projects are attempted each year.