



Masters of Science in Game Design & Development

Implementation Details & FAQ

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Rochester Institute of Technology

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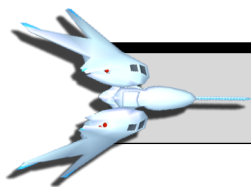


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I. Purpose of this document

This document offers supplemental materials not found in the formal proposal for the Masters in Game Design and Development. The formal proposal is constructed around the proposal formally prescribed by the RIT Provost’s Office, and has strong overlap with the proposal format for the New York State Office of Education. As such, the specifics of implementation are often not addressed in the formal proposal. In presenting the proposal to a number of faculty and administrators, there were numerous questions about the specific operations and way the degree would “fit” students at RIT.

These questions were of a nature that typically might be answered in a graduate handbook or advising material, or in some cases an admissions brochure. Since the degree is still in the proposal phase, none of these materials have yet been created. As such, we have prepared this document to initially respond to these issues, as we don’t feel it is appropriate for such material to be a part of the formal proposal. It is the purpose of the proposal to deal with the “general case” – i.e. a new student that applies to the program. That some students have completed an undergraduate degree from RIT is beside the point in that regard: the Game Design and Development Masters is not a “4+1 combined” proposal at this time. Nonetheless, we would be remiss not to address the questions of the faculty, as they are both insightful and timely. This document seeks to address concerns that have been raised in such manner, that we felt were inappropriate to address in the formal proposal due to its nature as an eventual external document. We fully expect that material such as that presented here would eventually find its way to student advising materials and promotional material for the degree in the event it is approved.



II. Questions Arising from Admissions

A. Portfolio Admissions

The Game Design and Development degree program contains a mandatory portfolio as a part of the application process. All applicants, regardless of undergraduate affiliation, are required to submit a portfolio of work. Portfolios may include (but are certainly not limited to) the following types of articles:

- Small games or programming exercises from undergraduate work
 - Simple game engines
 - Attempted work in game artificial intelligence
 - Level or map systems
 - Work in computer graphics
 - Usage of current APIs
- Level designs
- Character designs
- Work in user-interface or control systems for games / entertainment
- Game “mods” for existing titles, constructed using scripting languages
- Game development narratives
- Audio treatments (music, audio effects, etc.)
- Internal and external documentation samples
- 2D or 3D game art / models / etc.
- Group work at the undergraduate level

The primary focus of the portfolio review is to ensure that students have undergraduate preparation in their chosen major track within the Game Design and Development degree. Students will **declare** their desired major track sequence as a part of the application process: thus a student that wants to major in game AI would have a portfolio representative of undergraduate preparation for such work (an undergraduate course, AI experiments in existing engines, etc.) The portfolio process is also designed to provide baseline samples of core concepts such as object-oriented programming, computer literacy, and other desired skills. All entering students would be expected to exhibit these skills, regardless of track selection.

B. Timing of Admissions Procedures

The exact timing of the admissions process has yet to be finalized. In contrast to some other degrees within GCCIS, there will be **ONE** entry point into the program, in the fall quarter. Students may submit an application at any time, but these will be held in a queue and reviewed annually. Applications will be due sometime in the month of December (the exact date has yet to be determined). By January 15th, the administrative committee for the Game Design & Development degree (or their delegates) will have reviewed the portfolios and determined an approximate entering class of 30, and an additional ‘wait list’ of applicants should a spot become



available. Notifications will be sent to arrive in early February. Students will be required to submit deposits on acceptance no later than March 15th.

C. Advising of Students Prior to Arrival on Campus

Given that students will have been accepted and committed to the program in March, with classes not beginning until September, the question has arisen how to advise them prior to their arrival at RIT. This is handled in three ways: first, it is necessary to understand that students will select a major and minor track as a part of the application process, based on descriptions in materials and conversations as a part of the applications process. Second, after acceptance students will be given contact information with the advising staff, as well as their projected fall quarter schedule (there is no variation in the fall quarter, once major and minor are selected). Finally, the students will also have the ability to contact the faculty for any issues that may arise between their acceptance and eventual journey to RIT.

No student will be admitted ‘conditionally’ to the program, meaning that no accepted student will be admitted with a prescribed bridge sequence for full enrollment in the fall quarter of the degree. Any borderline applicant that has deficiencies identified as a part of the review process will be advised of these deficiencies and how to correct them (i.e. additional programming coursework or other appropriate activity), and encouraged to re-apply or develop a plan that rectifies these deficiencies prior to the fall quarter. This will not imply or guarantee preferential treatment for the next admissions cycle. At no time will students in this situation be guaranteed a position in the entering class.

III. Questions Concerning Existing Students at RIT

A. Undergraduate Preparation

It is expected that several students within our existing undergraduate degrees may choose to apply to this program. In terms of undergraduate advising for Computer Science, Information Technology and Software Engineering students, we recommend the following, but these are just that: recommendations. It would be impossible to calculate all possible permutations of undergraduate degree configurations, but in general these are our thoughts on the process.

Students in GCCIS may be advised to select:

Undergraduate Area	Recommended course selection
Science	Physics preferred over either Biology or Chemistry for work in GD&D
Foreign Language	Japanese
Liberal Arts Electives	Creative Writing, any History coursework, and any Art History as available.
Professional Electives	undergraduate minor in Computer Graphics Design or Computer Animation.



In terms of courses within GCCIS, we expect students will have completed the following: BS in CS, IT, or SE. In particular students should have at a minimum either CS1-3 or Programming for Information Technology 1-3 and Programming for Digital Media (4002-434). Students are encouraged to take the “Game Programming Concentration” at the undergraduate level if they so choose, but it is not required for application to the Masters degree.

B. Credit for Undergraduate Coursework

The question has also been raised, in relevance to the section above, “if a student takes the ‘undergraduate version’ of a course, what happens at the graduate level?” This is an issue that will need to be addressed on a course-by-course basis. It may not be appropriate, for example, for a student to take the undergraduate version of Computer Graphics I, only to then be required to take the graduate version. On the flip side, the undergraduate coursework in 2D and 3D graphics programming were explicitly kept as separate sections because we expect that the graduate coursework will diverge significantly. Thus students that complete the undergraduate Concentration in Game Programming will have a ‘leg up’ in that coursework, but would in fact be well-served in taking the graduate versions of those courses.

In any case, where a course is waived at the graduate level, a suitable replacement course would need to be found, with the consent of the faculty advisor. This will be a specific requirement for RIT graduates and is not seen as overly onerous. At this time, there is no credit-hour or time-in-residence reduction for students that have completed undergraduate work at RIT, although this may change in the future. Thus, the degree requirement of 62 credit hours will not be changed if a student has completed an undergraduate course – they will need to fill the credits with another course that complements their plan of study.

C. Transfer Credit

Standard rules for transfer credit, as they relate to RIT graduate programs, apply here. Students can transfer up to 12 credit-hours from another institution or program. These credits may count towards the completion of the degree, as deemed appropriate by the admissions committee. These credits cannot then count towards any other graduate degree. In cases where transfer credit allows a student to fall below the full-time enrollment requirements, students will have the option of filing for equivalency for the given quarter or taking an elective course in another area.

D. Reduced Time to Degree Completion

At no time will students be given a reduced time-to-completion schedule. We may, in the future, propose a “4+1” model or other arrangement for our undergraduates, but that is not a part of the proposal at this time. In its current incarnation all students, regardless of undergraduate affiliation or transfer credit, are required to spend two years in residence at RIT, culminating in the Capstone Design and Development sequence as a part of the cohort experience.



IV. Issues Related to Cohort Based Programs

The program is designed to be completed in a cohort fashion, and students are selected for admission in part based on major/minor selection, to achieve balance in the selected areas. Thus, the ability for students to “change majors” is severely limited. Namely, they can, in the first year, swap their major into a minor, and major in their previous minor, assuming their previous minor can support a major core area. Beyond this, however, students should not be switching majors often, or if they do it may require additional time-to-completion. As students will have chosen their major as a part of their application process, and in conjunction with academic advising, this should not be a major issue within the program.

The one “wrinkle” in this scenario is if a student chooses to do a “co-op” during their degree. Because of the cohort nature of the program, students have only two options for a co-op experience: either the nature of their work experience could be completed in the summer between the first and second year, or the student could work an entire year, skipping a year between their first and second academic experiences. Such a scenario would mean that a student would enter with one cohort, and finish with another, but would be “on track” for both the seminar sequences and capstone experience with respect to scheduling and enrollment.

