

## **Accelerated Undergraduate/Graduate (BS/MS) Dual Degree Program in Software Engineering (BS) and Computer Science (MS)**

The BS degree in Software Engineering requires 125 semester hours and the MS degree in Computer Science requires 30 semester hours. Undergraduate Software Engineering majors who enter the accelerated BS in Software Engineering/MS in Computer Science dual degree program are **permitted to double count up to 6 semester hours of overlapping courses**. The overlapping hours all come from graduate courses which fulfill graduate program requirements and which are also used to satisfy credit hour requirements for the baccalaureate degree. Specifically, two graduate level Computer Science courses may be chosen to fulfill Free Electives required for the BS degree in Software Engineering. Other than the 6 semester hours of courses that students may double count toward their BS degree in Software Engineering and the MS degree in Computer Science, students complete all other BS degree requirements, including co-op and wellness.

Undergraduate students with the proper prerequisites are permitted and encouraged to take graduate-level Computer Science courses. It has been determined that undergraduate students who have completed the first four years of the BS in Software Engineering degree will have the necessary background to take two recommended graduate-level Computer Science courses to be counted toward both degrees. With two graduate-level Computer Science courses completed as part of the BS degree, students will be able to complete the MS in Computer Science with two or three additional semesters. It should also be noted that Computer Science offers both a project and a thesis option for completing the MS degree.

Undergraduate students who apply to RIT in Software Engineering are initially accepted into only the BS degree program. Students interested in the accelerated BS in Software Engineering/MS in Computer Science dual degree program request entry into this program using a Change of Program form. **We encourage students to wait until at least the end of their second year at RIT before making this request**. Students should consult their academic advisor prior to officially filing the form. The Associate Graduate Coordinator in Computer Science determines whether or not a student is admitted into the accelerated BS in Software Engineering/MS in Computer Science dual degree program.

*We will not define all possible combinations of Software Engineering and Computer Science courses and program paths* that might be used for a BS in Software Engineering/MS in Computer Science combination, although we illustrate one possible scenario below. *We stress that this scenario is meant to demonstrate the feasibility of completing the accelerated BS in Software Engineering/MS in Computer Science dual degree program in two or three additional semesters beyond the BS degree*. Rather, we will advise students and guide them in putting together appropriate collections of courses that help them satisfy requirements and meet their goals once they are admitted to the accelerated BS/MS dual degree program. In addition to speaking with their academic advisor, students should also read through both the Undergraduate and Graduate materials which are posted online for more specific details, requirements, and restrictions associated with the BS and MS degrees.

**Illustrative BS in Software Engineering/MS in Computer Science Scenario – Professional Path and Computer Graphics and Visualization Cluster**

<b>Year 1 – Fall</b>	CSCI 141	MATH 181	Gen Ed Artistic Perspective	Gen Ed Ethical Perspective	SWEN 101	ACSC 010
<b>Year 1 – Spring</b>	CSCI 142	MATH 182	MATH 190	SWEN 250	Gen Ed First Year Writing Course	Wellness Activity
<b>Year 1 – Summer</b>						
<b>Year 2 – Fall</b>	SWEN 261	SWEN 220	PHYS 211	COMM 253	Gen Ed Global Perspective	Wellness Activity
<b>Year 2 – Spring</b>	SWEN 262	SWEN 256	PHYS 212	STAT 205	Gen Ed Social Perspective	
<b>Year 2 – Summer</b>						
<b>Year 3 – Fall</b>	SWEN 499 (co-op)					
<b>Year 3 – Spring</b>	SWEN 444	SE Process Elective	CSCI 261	Math/Science Elective	Gen Ed Immersion	
<b>Year 3 – Summer</b>						
<b>Year 4 – Fall</b>	SWEN 440	SWEN 331	CMPE 240	Math/Science Elective (**)	Gen Ed Immersion	
<b>Year 4 – Spring</b>	SWEN 499 (co-op)					
<b>Year 4 – Summer</b>	SWEN 488 (co-op)					
<b>Year 5 – Fall</b>	SWEN 561	SE Design Elective	Engineering Elective	Gen Ed Immersion	Free Elective	
<b>Year 5 – Spring</b>	SWEN 562	Professional Elective	Engineering Elective	Free Elective (use CSCI 664 – BS/MS Overlapping)	Free Elective (use CSCI 6xx Foundations course – BS/MS Overlapping)	
<b>Year 5 – Summer</b>						
<b>Year 6 – Fall</b>	CSCI 712 (*)	CSCI 631	CSCI 6xx or CSCI 7xx	CSCI 799		
<b>Year 6 – Spring</b>	CSCI 711 (*)	CSCI 641	CSCI 6xx or CSCI 7xx	CSCI 788 (**)		

(\*) Student would have taken CSCI 610 prior to year 6.

(\*\*) A third semester may be required, especially if a student opts to take CSCI 790 (thesis) rather than CSCI 788 (project) or depending on which graduate-level cluster a student pursues. To broaden the range of choices for the MS, it is highly recommended that students take CSCI 262 as one of their Math/Science electives.