

PROGRAM REQUIREMENTS

www.cvtc.edu - 1-800-547-2882

START DATE(S): January	EFFECTIVE: JANUARY 2011
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NANOSCIENCE TECHNOLOGY: Program Outcomes

Associate Degree

Course Number	Course Title	Hrs./Week	Credits	Prerequisite(s)/Comments
First Semester (January)				
606-161	CAD, Basic	5	3	
635-100	Fundamentals of Nanoscience	4	3	<u>Spring only, Program or pre-program student, 806-134 or concurrent</u>
635-101	Introduction to Microfabrication	4	3	
804-118	Intermediate Algebra with Applications	4	4	<u>804-110 with a "C" or better (See Prepared Learner Guide)</u>
806-134	General Chemistry	5	4	<u>(See Prepared Learner Guide)</u>
	Total Semester Hrs./Week and Total Credits	17	17 cr.	
Second Semester (August)				
635-103	Nanoelectronics	4	3	<u>Program student, 635-101</u>
635-118	Nano Cell Biology 1	3	3	<u>Fall only, Program student, 635-100</u>
804-189	Introductory Statistics	3	3	<u>Fall only, 804-118</u>
806-154	General Physics 1	5	4	<u>Fall only, 804-118. (See Prepared Learner Guide)</u>
	Total Semester Hrs./Week and Total Credits	17	13 cr.	
Third Semester (January)				
635-104	Nano Cell Biology 2	4	3	<u>Spring only, 635-118</u>
635-105	Nanomaterials	4	3	<u>Spring only, 635-101, 635-103, Corequisite: 635-117</u>
635-109	Principles and Applications of Nanobiotechnology	2	2	<u>Corequisites: 635-104, 635-105, 635-114</u>
635-114	Biochips Lab	4	2	<u>635-103, Corequisites: 635-104, 635-105, 635-109</u>
635-117	Nanoscience Manufacturing and QA	4	3	<u>Spring only, 804-189, Corequisite: 635-104, 635-105</u>
635-115	Nano Industry Practicum (72 hrs.)		1	<u>635-117 or concurrent</u>
	Total Semester Hrs./Week and Total Credits	18	14 cr.	
Fourth Semester (August)				
635-108	Micro and Nano Fabrication	2	2	<u>635-103, Corequisites: 635-104, 635-105, 635-112</u>
635-112	Micro and Nano Fabrication Lab	4	2	<u>635-103, Corequisites: 635-104, 635-105, 635-108</u>
635-119	MEMS and Microfluidics	4	3	<u>Corequisites: 635-121</u>
635-121	MEMS and Microfluidics Design	3	2	<u>606-161, Corequisites: 635-119</u>
635-111	Intro to Materials Characterization (UW-Eau Claire)	3	3	<u>635-103, 635-104, 635-105, Corequisites: 635-113</u>
635-113	Materials Characterization Lab (UW-Eau Claire)	2	1	<u>635-103, 635-104, 635-105, Corequisites: 635-111</u>
	Total Semester Hrs./Week and Total Credits	17	13 cr.	
Remaining General Education Requirements for Graduation:				
801-195	Written Communications	3	3	<u>(See Prepared Learner Guide)</u>
801-196	Oral/Interpersonal Communications	3	3	<u>(See Prepared Learner Guide)</u>
809-196	Introduction to Sociology	3	3	<u>(See Prepared Learner Guide)</u>
809-198	Introduction to Psychology	3	3	<u>(See Prepared Learner Guide)</u>
	Total Semester Hrs./Week and Total Credits	21	12 cr.	

TOTAL CREDITS REQUIRED = 69

2.0 MINIMUM PROGRAM CUMULATIVE GPA REQUIRED FOR GRADUATION

If a student does not enroll in any courses at CVTC for two or more consecutive semesters, the student will be required to reapply with Admissions. Students must abide by any changes in admission requirements and degree requirements.

Nanoscience Tips

Prepared Learner

Prepared Learner classes are designed to get students ready for a variety of college-level academics, including reading, writing, math and science. Scores on the COMPASS[®] or ACT assessments will tell us if you need to take one or more areas of these classes, which may be required for some Gen Ed classes. Students must successfully complete each required Prepared Learner class with a C grade or better before registering for some General Education courses.

Students will need to choose four credits from the following courses at UW-Eau Claire to complete the requirement for 635-111 Introduction to Materials Characterization and 635-113 Materials Characterization Lab:

- MSCI 301 Materials: Scanning Electron Microscopy, 1 credit
- MSCI 302 X-Ray Photoelectron Spectroscopy, 1 credit
- MSCI 303 X-Ray Diffraction, 1 credit
- MSCI 305 X-Ray Fluorescence Spectroscopy, 1 credit
- MSCI 306 Transmission Electron Spectroscopy, 1 credit
- MSCI 307 Materials: Nanoindentation, 1 credit

For more information about the UW-Eau Claire courses, please contact Doug Dunham at 715-836-5312 or dunhamdj@uwec.edu.

Transfer Credit

Individuals planning on transferring to a Wisconsin university have the option to take 200-level transfer courses that may count towards requirements in the four-year degree being pursued. While all of the 100-level associate degree general education courses listed on the Nanoscience program sheet are approved for general transfer, the specific requirements of a given program may prefer the 200-level courses listed below:

- 801-219 English Composition 1, 3 credits
- 801-223 English Composition 2, 3 credits
- 804-224 College Algebra, 4 credits
- 806-276 General Physics 1, 5 credits
- 806-245 Principles of General Chemistry 1, 5 credits

*Eligibility to take 200 level courses will require meeting COMPASS/ACT scores.

To see what courses transfer to a public postsecondary institution in Wisconsin, go to the Transfer Information System at www.uwsa.edu/tis,

- Click on Credit Transfer Wizard
- Click on Course Wizard

You must contact the college you wish to attend to find out exactly what they expect and when you should seek admission. The Transfer Information System does not include private colleges or out-of-state institutions.

Financial Aid Consideration:

Some courses may not be eligible for financial aid. Courses must be part of a program to be eligible. A list of courses not eligible is located on www.cvtc.edu.