

PROGRAM REQUIREMENTS

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

START DATE(S): January	EFFECTIVE: JANUARY 2005
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NANOSCIENCE TECHNOLOGY

Associate Degree

Course Number	Course Title	Hrs./Week	Credits	Prerequisite(s)/Comments
First Semester (January)				
635-100	Fundamentals of Nanoscience I, (T, L)	4	3	<u>Spring only, Program student-M</u>
801-195	Written Communications	3	3	
804-150	Math 100	4	3	<u>Program student-M</u>
806-174	General Chemistry	5	4	
	Elective		3	
	Total Semester Hrs./Week and Total Credits		16 cr.	
Summer Semester				
801-196	Oral/Interpersonal Communications	3	3	
809-199	Psychology of Human Relations	3	3	
	Total Semester Hrs./Week and Total Credits		6 cr.	
Second Semester (August)				
635-101	Fundamentals of Nanoscience II, (T, L)	4	3	<u>Fall only, 635-100</u>
804-130	Applied Statistical Analysis	4	3	<u>Fall only, 804-150</u>
806-114	General Biology	5	4	<u>Fall only</u>
806-124	Introduction to Physics	5	4	<u>Fall only, Program student-M</u>
809-197	Contemporary American Society	3	3	
	Total Semester Hrs./Week and Total Credits		17 cr.	
Third Semester (January)				
623-125	Statistical Process Control, (T)	3	3	<u>Spring only</u>
635-103	Nanoelectronics, (T, L)	4	3	<u>Spring only, 635-101</u>
635-104	Nanobiotechnology/Agricultural, (T, L)	3	2	<u>Spring only, 635-101, 806-114</u>
635-105	Nanomaterials, (L)	3	2	<u>Spring only, Corequisite: 623-125</u>
801-197	Technical Reporting	3	3	<u>801-195</u>
	Elective		3	
	Total Semester Hrs./Week and Total Credits		16 cr.	
Summer Semester (May – August)				
635-108	Micro and Nano Fabrication (U of M), (T), <i>(11 weeks)</i>	4	3	<u>635-103, 635-104, 635-105, Corequisites: 635-109, 635-110, 635-111, 635-112, 635-113 and 635-114</u>
635-109	Principles and Applications of Nanobiotechnology (U of M), (T), <i>(11 weeks)</i>	4	3	<u>635-103, 635-104, 635-105, Corequisites: 635-108, 635-110, 635-111, 635-112, 635-113 and 635-114</u>
635-110	Thin Film Deposition (U of M), (T, L) <i>(11 weeks)</i>	7	4	<u>635-103, 635-104, 635-105, Corequisites: 635-108, 635-109, 635-111, 635-112, 635-113 and 635-114</u>
635-111	Intro to Materials Characterization (U of M), (T) <i>(11 weeks)</i>	4	3	<u>635-103, 635-104, 635-105, Corequisites: 635-108, 635-109, 635-110, 635-112, 635-113 and 635-114</u>
635-112	Micro and Nano Fabrication Lab (U of M), (L) <i>(11 weeks)</i>	3	1	<u>635-103, 635-104, 635-105, Corequisites: 635-108, 635-109, 635-110, 635-111, 635-113 and 635-114</u>
635-113	Materials Characterization Lab (U of M), (L) <i>(11 weeks)</i>	3	1	<u>635-103, 635-104, 635-105, Corequisites: 635-108, 635-109, 635-110, 635-111, 635-112 and 635-114</u>
635-114	Nanoparticles and Biochips Lab (U of M), (L) <i>(11 weeks)</i>	3	1	<u>635-103, 635-104, 635-105, Corequisites: 635-108, 635-109, 635-110, 635-111, 635-112 and 635-113</u>
	Total Semester Hrs./Week and Total Credits	28	16 cr	
Final Eight Weeks (August-October)				
635-115	Industry Internship Experience (CVTC) <i>(8 weeks)</i>		1	<u>635-114</u>
	Total Semester Hrs./Week and Total Credits		1 cr.	

TOTAL CREDITS REQUIRED = 72

2.0 MINIMUM PROGRAM CUMULATIVE GPA REQUIRED FOR GRADUATION

U of M = University of Minnesota

T = Theory

L = Lab

10-635-1

Dept/Chair/PgmDir: HMIKELSON

PgmDean/CampusAdm: SMICHAUD

Counselor: JSCHINDLER/JMOLDENHAUER

PgmAssist: JGRUBER

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04/29/04, revised 09/08/04, 9/10/04, 9/13/04, 09/15/04, 09/20/04, 10/11/04, 07/26/05