

ENGINEERING

Associate in Science Degree

(An Articulated Program with the University of Minnesota – Twin Cities)

NOTE: This information is meant specifically for students transferring to the University of Minnesota – Twin Cities. Depending upon the student's particular engineering area (Electrical Chemical, Mechanical, etc) it is extremely important to meet with engineering faculty and counselors to make sure that the correct courses needed are chosen.

I. Minnesota Transfer Curriculum General Education Requirements.....33 Credits

Goal 1: Written and Oral Communication (CM).....4 cr

ENGL 1117*, Reading & Writing Critically I, 4 cr

Goal 2: Critical Thinking (CT) MAY BE MET BY ANY COURSE IN MNTC 1-10 GOALS

Goal 3: Natural Sciences (NS).....10 cr

PHYS 1127, 1128, Classical Physics I, II, 10 cr

Goal 4: Mathematics/Logical Reasoning (MA).....10 cr

MATH 1127, 1128, Calculus I, II, 10 cr

Goal 5: History and Social and Behavioral Sciences (SS).....6 cr

Students should take ANTH 1612 and select one history course from the following:
HIST 1611, 1612, 1613, 1614, 1615, 1621, 1622, 1624, 1625, 1628, 1631, 1640.

Goal 6: The Humanities - the Arts, Literature and Philosophy (HA)... 3 cr

3 credits from: Art, English Literature*, Foreign Culture, Humanities*, Journalism, Music, Philosophy*, Speech/Theater. Students should go to the web link http://www.it.umn.edu/prospective/transferring_credit.html, click on the Minnesota Colleges and Universities line, then click on the Rochester CTC link; this opens the Liberal Education Requirements Course Transfer Guide. Go to the Arts/Humanities section and select a course from among those listed.

***Honors option available**

Note: Students planning to transfer to the University of Minnesota – Twin Cities should be aware that for graduation with a B.S. in engineering, either 2 years of high school foreign language or 2 semesters of college foreign language is required.

II. Professionally-related requirements.....31 Credits

Courses from the following list are to be chosen based upon the student's area of emphasis (electrical, mechanical, chemical, etc.) and the institution to which the student intends to transfer. Students should contact RCTC engineering faculty and counselors to determine which courses will match their needs.

MATH 2237	Multivariable and Vector Calculus	5 cr
MATH 2238	Differential Equations & Linear Algebra	5 cr
MATH 2218	Discrete Mathematics	4 cr
CHEM 1127	Chemical Principles I	4 cr
CHEM 1128	Chemical Principles II	4 cr
CHEM 2127	Organic Chemistry I	5 cr
CHEM 2128	Organic Chemistry II	5 cr
COMP 1150	Computer Science Concepts	3 cr
COMP 2243	Programming and Problem Solving	4 cr
COMP 2247	Algorithms and Data Structures	4 cr
ENGR 1152	Logic Design	4 cr
ENGR 1153	Microprocessors	4 cr
ENGR 2211	Statics	3 cr
ENGR 2212	Dynamics	3 cr
ENGR 2213	Linear Circuit Analysis I	4 cr
ENGR 2214	Linear Circuit Analysis II	4 cr
BIOL 1220	Concepts of Biology	4 cr
ESCI 1114	Physical Geology	4 cr

Total.....64 Credits

Implemented: Fall 2004; Revised: 07/26/2004; Reviewed: 02/2008

**For additional information contact the RCTC Counseling office at 507-285-7260;
located in SS133-143.**

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