RCTC PROGRAM PLAN

CHEMISTRY TRANSFER PATHWAY

Associate of Science

I. MINNESOTA TRANSFER CURRICULUM (MnTC)/ GENERAL EDUCATION REQUIREMENTS.....31 CREDITS

Complete at least 31 credits in courses from the Minnesota Transfer Curriculum (MnTC), including all courses listed. You must complete at least one course in six of the ten goal areas.

GOAL 1: WRITTEN AND ORAL COMMUNICATION .....11 CR

COMM 1114, Fundamentals of Public Speaking, 3 cr
ENGL 1117, Reading and Writing Critically I, 4 cr
ENGL 1118, Reading and Writing Critically II, 4 cr

GOAL 2: CRITICAL THINKING MAY BE MET BY ANY COURSE IN MnTC 1-10 GOALS

GOAL 3: NATURAL SCIENCES .....9 CR

CHEM 1127, Chemical Principles I, 4 cr
PHYS 1127, Classical Physics I, 5 cr

GOAL 4: MATHEMATICS/LOGICAL REASONING.....5 CR

MATH 1127, Calculus, 5 cr

GOAL 5: HISTORY AND THE SOCIAL AND BEHAVIORIAL SCIENCES .....3 CR

Credits from MnTC Goal 5

GOAL 6: HUMANITIES - THE ARTS, LITERATURE AND PHILOSOPHY .....3 CR

Credits from MnTC Goal 6

II. PROGRAM REQUIREMENTS.....22 CREDITS

CHEM 1128, Chemical Principles II, 4 cr
CHEM 2127, Organic Chemistry I, 4 cr
CHEM 2128, Organic Chemistry II, 4 cr
MATH 1128, Calculus II, 5 cr
PHYS 1128, Classical Physics II, 5 cr

III. ELECTIVES.....7 CREDITS

Credits recommended from MnTC Goal 7, 8, 9, or 10

TOTAL .....60 CREDITS

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PROGRAM OUTCOMES:

Upon completion of the Chemistry Transfer Pathway program at RCTC, students will achieve the following outcomes:

- Demonstrate basic knowledge and understanding of the fundamentals of experimental and theoretical chemistry.
- Apply skills in analytical thinking and problem solving to experimental and theoretical data.
- Demonstrate skills in laboratory operations including making measurements, preparing solutions, operating instrumentation, designing experiments, preparing samples for various analyses.
- Provide clear and compelling data and analysis in oral and written communication including papers, posters, or presentations.
- Work both independently and collaboratively in the classroom and in the laboratory.
- Apply learned concepts to life outside the classroom.

ADDITIONAL INFORMATION:

The Chemistry Transfer Pathway, AS offers students an opportunity to earn course credits that directly transfer to a designated Chemistry bachelor's degree program at Minnesota State universities. The entire curriculum has been carefully designed to meet bachelor's degree program requirements for transfer students planning initial study at a Minnesota State college. Students planning to transfer to non-system universities are advised to consult with their intended transfer institution as early as possible to determine transferability of the courses in this curriculum.

This transfer pathway degree will transfer to the following designated baccalaureate degree majors:

At Bemidji State University:
Chemistry - ACS Approved, BS
At Metropolitan State University:
Chemistry, BS
At Minnesota State University, Mankato:
Chemistry - ACS Approved, BS
At Minnesota State University, Moorhead:
Chemistry – ASC Approved, BS
At Southwest Minnesota State University:
Chemistry, BA
At St. Cloud State University:
Chemistry – ASC Approved, BS
At Winona State University:
Chemistry – ASC Approved, BS

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