

RCTC PROGRAM PLAN

COMPUTER INFORMATION SYSTEMS

Associate of Science

I. MINNESOTA TRANSFER CURRICULUM (MnTC)/

GENERAL EDUCATION REQUIREMENTS.....37 CREDITS

Complete at least 30 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 COMMUNICATION11 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 3: NATURAL SCIENCES6 CR

Choose two courses with labs from two different areas from MnTC Goal 3

GOAL 4: MATHEMATICS/LOGIAL REASONING3 CR

MATH 1119, Applied Calculus for Business and Economics, 3 cr **OR**
MATH 1127, Calculus I, 5 cr

GOAL 5: HISTORY AND THE SOCIAL AND BEHAVIORIAL SCIENCES11 CR

ECON 2214, Principles of Microeconomics, 4 cr
ECON 2215, Principles of Macroeconomics, 4 cr
Remaining credits from MnTC Goal 5 courses (other than ECON), 3 cr

GOAL 6: HUMANITIES - THE ARTS, LITERATURE AND PHILOSOPHY6 CR

Choose a minimum of two credits from two different areas from MnTC Goal 6

II. PROGRAM CORE REQUIREMENTS.....23 CREDITS

ACCT 2217, Principles of Accounting I, 4 cr
COMP 1150, Computer Science Concepts, 3 cr
COMP 2243, Programming & Problem Solving, 4 cr
COMP 2247, Algorithms and Data Structure, 4 cr
MATH 2218, Discrete Mathematics, 4 cr
MATH 2350, Introduction to Mathematical Statistics, 4 cr

TOTAL60 CREDITS

PROGRAM OUTCOMES:

Upon completion of the Computer Information Systems program at RCTC, students will achieve the following outcomes:

- Apply mathematical foundations, algorithmic principles, and computer science concepts to analyze and design software solutions.
- Design, implement and validate software using Java in conjunction with graphical user interface.

RCTC PROGRAM PLAN

- Apply current design techniques including the effective application of data structures, recursion, and object-oriented technologies for software solutions.
- Evaluate the efficiency of software algorithm using Big O notation.
- Develop logical resonating and problem-solving skills.
- Work as part of a team to analyze, design and implement software solutions.
- Define basic computer terminology and identify ethical issues related to the use of computers.
- Create and manipulate word processing documents, spreadsheets, and databases.

Revised: 11/13/2018

Implementation: Spring 2019