

SOFTWARE DEVELOPMENT, CERTIFICATE OF ACHIEVEMENT

This certificate prepares students with practical skills in computer programming and software development, suitable for entry-level employment in a number of areas where new software is needed. Students master the fundamentals of programming in both structured and object-oriented contexts across several different languages; work with techniques of abstraction, algorithms, and data structures; and develop readable, maintainable, and efficient moderately sized programming solutions. Some students may find this a suitable path to further academic study in Computer Science or Computer Engineering.

Learning Outcomes

Certificate of Achievement Requirements

Code	Title	Units
Required Core		
CSIS 9	Programming Fundamentals: Python	3
CSIS 10A	Programming Methods I: Java	4
CSIS 10B	Programming Methods II: Java	4
CSIS 10C	Programming Methods I.5: C and C++	4
Select one course from the following:		2-3
CSIS 51C	Database Processing	
CSIS 77	Web Design and Publishing	
CSIS 98	Project Development	
Total Units		17-18

Please refer to the graduation requirements section of the Catalog for information about degree and certificate requirements including Reading and Writing, Mathematics, Information Competency, and General Education requirements.

MPC "Ready to Work" Career Education programs offer students the opportunity to gain knowledge and skills needed for employment and job advancement.

All students should consult with a Counselor to discuss career pathways, for support with career exploration and planning, and to create a personalized education plan to help them meet their academic, career, and personal goals. Visit MPC's Counseling website for more information about Counseling services provided by MPC and to connect with a Counselor.

Additional resources are available through MPC's Career & Transfer Resource Center (CTRC). The CTRC offers career resources, workshops, guidance and referrals. Visit the CTRC for support finding online career information and other resources to explore majors, occupations, and employment information.