

MHS Early College Pathways

College/Career Pathway

GRADE 11

GRADE 12

Computer Info Sys (IT)

CIS 111 – Intro to Microcomputer Applications
CIS 105 – Intro to Information Technology

CIS 121 – Intro to Programming C++
CIS 134 – Web Page Development I

Manufacturing Tech

CIS 111 – Intro to Microcomputer Applications
MNT 100 – Manufacturing Safety

MNT 101 – Mechanical CAD I
MNT 110 – Manufacturing Process I

Engineering

ENG 101 – Composition I
ENG 102 – Composition II
Students should consider taking Engineering courses

MAT 123 – College Mathematics I (Pre-Calculus)
MAT 124 – College Mathematics II (Trigonometry)
Students should consider taking Engineering courses

Computer Science

CIS 111 – Intro to Microcomputer Applications
ENG 101 – Composition I
ENG 102 – Composition II
Students should consider taking AP Computer Science courses

MAT 123 – College Mathematics I (Pre-Calculus)
MAT 124 – College Mathematics II (Trigonometry)
Students should consider taking AP Computer Science courses

Nursing/Healthcare

ENG 101 – Composition I
ENG 102 – Composition II
Students should consider taking Anatomy & Physiology and AP Biology courses

PSY 101 – Intro to Psychology
SOC 101 – Intro to Sociology
TEAS Review & CPR/1st Aid Cert
Students should consider taking Anatomy & Physiology and AP Biology courses

Biotechnology

ENG 101 – Composition I
ENG 102 – Composition II
Students should consider taking Biotechnology and AP Biology courses

MAT 123 – College Mathematics I (Pre-Calculus)
MAT 124 – College Mathematics II (Trigonometry)
SOC 101 – Intro to Sociology
Students should consider taking Biotechnology and AP Biology courses

2016 – 17 Course Descriptions

CIS 105 Introduction to Information Technology

This course provides an overview of the core aspects of information technology. The topics include: computer hardware, operating systems, application software, networks, information security, interactive media, and programming. The course focuses on defining how each IT area relates to, and interacts with, each other. Upon completion of the course, students have the knowledge necessary for further study in IT as well as understanding of the impact of technology on society and organizations of all types. Knowledge and competencies in this course are in National Career Cluster Core IT Standards published by the Educational Development Center (EDC).

Credits: 3

CIS 111 Introduction to Microcomputer Applications

This course focuses on basic working knowledge and hands-on experiences in word processing, spreadsheet processing, database processing, and presentation software. Students acquire an overview of computer concepts, the most common business office operating systems, the Internet, and the World Wide Web.

Credits: 3

ENG 101 Composition I

This course focuses on how to develop essential writing skills including organization, correctness, and support of ideas. A research project is required to produce a documented essay that integrates materials from Internet and traditional sources according to standard disciplinary format. Students develop and sharpen the interpretive and analytical skills necessary to evaluate the soundness and appropriateness of sources for their work.

Credits: 3

Prerequisite: ENG 101 Placement score on Accuplacer or successful completion of ENG 096 with a C or better (summer bridge offering at MHS)

ENG 102 Composition II

This course employs literary texts to provide examples for students to continue and refine writing and reading skills. Assigned readings include plays, poems, novels, short stories, epic narratives, personal essays, and satire. Writing assignments emphasize students' close reading skills and their interpretation and analysis of creative works.

Credits: 3

Prerequisite: ENG 101

MNT 100 Manufacturing Safety

This course provides an introduction to the principles of safety, guidelines for the design of equipment, and explanations of why certain practices should or should not be followed in the manufacturing environment. Students evaluate human reactions in normal and abnormal conditions, and compare features required for safe working conditions to industry standards.

Credits: 3