DRAKE STATE
COMMUNITY & TECHNICAL COLLEGE

Program Completion Guide
CIP Code - 15.0613
Engineering Design - DDT
Associate in Applied Science (AAS Degree)
2023-2024

Area I: Written Composition (6 Semester Hours Total)

Courses	Courses Taken	Hours Earned
ENG101		
ENG102		

Area II: Humanities and Fine Arts (3 Semester Hours Total)

Courses	Courses Taken	Hours Earned
ART100, ENG251, ENG252, ENG261, ENG262, ENG271, ENG272, MUS101, PHL206, REL100, REL151, REL152, SPH107		

Area III: Natural Science and Mathematics (10 Semester Hours Total)

Note: CIS146, MTH100 or higher and a 4 credit hour science course are required.

Courses	Courses Taken	Hours Earned
CIS146		
MTH100 or Higher MTH110, MTH112, MTH113, MTH115, MTH120, MTH125, MTH126, MTH227		
BIO103, BIO104, CHM111, CHM112, PHS111, PHS112, PHY201, PHY202		

Area IV: History, Social, and Behavioral Sciences (3 Semester Hours Total)

Courses	Courses Taken	Hours Earned
ECO231, ECO232, HIS121, HIS122, HIS201, HIS202, PSY200, PSY210		

Area V: Pre-Professional, Major, and Elective Courses (41 Semester Hours Total)

Courses	Credit Hours	Courses Taken	Hours Earned
Major Core Concentration (27 Semester Hours)			
ADM101 - Precision Measurement	3		
ADM102 - Computer Aided Design	3		
ADM106 - Quality Control Concepts	3		
ADM107 - CAD Concepts	3		
ADM108 - Intro to 3D Modeling	3		
ADM110 - Blueprint Reading	3		
ADM128 - Plastic Metal Processes	3		
ADM155 - Manufacturing Projects	3		
ADM215 - Geometric Dimensioning & Tolerancing	3		

Elective Courses (12 Semester Hours)			
ADM103 – Introduction to Computer Integrated Manufacturing (CIM) Materials and Processes	**3**		
ADM111 – Manufacturing Safety Practices	**3**		
ADM114 – Design Innovation	**3**		
ADM158 – Rheology	**3**		
ADM159 – Printer Safety and Maintenance	**3**		
ADM161 – Specialized Software Techniques	**3**		
ADM208 – Intermediate 3D Modeling	**3**		
ADM216 – 3D Graphics and Animation	**3**		
ADM260 – Portfolio	**3**		
ADM261 – Reverse Engineering	**3**		
ADM268 – Additive Manufacturing Processes – Regolith/Concrete	**3**		
ADM269 – Slump and Viscosity	**3**		
ADM283 – CO-OP	**3**		
DDT239 – Independent Studies	**3**		
GIS101 – Introduction to GIS	**2**		
GIS201 – Introduction to Geographic Information Systems	**3**		
GIS202 – Cartographic Design for GIS	**3**		
GIS221 – Advanced Spatial Analysis	**4**		
WKO110 – NCCER Core	**3**		
Institutional Requirements (2 Hours)			
ORI101 Take in the first semester unless student has 12 transfer credit hours			
BSS220 Take in last semester of program			

In Area I through Area IV, transfer credits are accepted in accordance to ACCS policy.

For additional courses see http://stars.troy.edu/approved_courses.html

Total Semester Hours Required for Degree: 63

Student Name:	**Signature of Advisor:**
Student Number:	**Date of Advising:**
Total Credit Hours Earned:	**Date Audited by Admissions:**

Certificates and Short Term Certificates are available:
- **Engineering Design – DDT-CER**   **38 hrs.**
- **Advanced Certificate – DDT-STC1**   **9 hrs.**
- **Mechanical Design Fundamentals – DDT-STC2**   **9 hrs.**
- **Mechanical Design Quality – DDT-STC3**   **12 hrs.**