CAST METALS - MINOR

College of Aeronautics and Engineering
School of Engineering
www.kent.edu/engineering

About This Program

The Cast Metals minor teaches students the fundamentals of casting, design and fabrication of patterns and molds; use of modern-day design tools; and real-world applications of metal casting. This minor is a perfect pairing for students studying art, engineering, architecture or engineering technology. Whether the goal is to become a master metalworker or design components that will be cast from metal, students in this minor are equipped with the knowledge and experience to understand processes and bolster their résumé.

Contact Information

- cae@kent.edu | 330-672-2892
- Speak with an Advisor

Program Delivery

- **Delivery:**
  - In person
- **Location:**
  - Kent Campus

Admission Requirements

Admission to a minor is open to students declared in a bachelor's degree, the A.A.B. or A.A.S. degree or the A.T.S. degree (not Individualized Program major). Students declared only in the A.A. or A.S. degree or the A.T.S. degree in Individualized Program may not declare a minor. Students may not pursue a minor and a major in the same discipline.

Program Requirements

Minor Requirements

Code	Title	Credit Hours
Minor Requirements		
ENGR 13586 & ENGR 13587	COMPUTER AIDED DESIGN I and COMPUTER AIDED DESIGN I LABORATORY	3
or MERT 12001	COMPUTER-AIDED DESIGN	
ENGR 20002	MATERIALS AND PROCESSES	3
or MERT 12004	MANUFACTURING PROCESSES	
ENGR 31065	CAST METALS	3
ENGR 33364	METALLURGY AND MATERIALS SCIENCE	3
ENGR 41065	SOLID MODELING AND SOLIDIFICATION SIMULATION	3
Minimum Total Credit Hours:		**15**

Graduation Requirements

Minimum Minor GPA	Minimum Overall GPA
2.000	2.000

- Minimum 6 credit hours in the minor must be upper-division coursework (30000 and 40000 level).
- Minimum 6 credit hours in the minor must be outside of the course requirements for any major or other minor the student is pursuing.
- Minimum 50 percent of the total credit hours for the minor must be taken at Kent State (in residence).

Program Learning Outcomes

Graduates of this program will be able to:

1. Understand best practices for working safely with molten metal and explore sustainable practices that minimize waste and environmental impacts.
2. Understand basic properties of different metals and how to choose the right metal for a project.
3. Understand the process of melting, molding and solidifying.
4. Gain practical skills applicable across a range of industries, including automotive, aerospace and fine arts.