

# Course: Object Oriented Programming

credits: 2

Course code ELVH17GOOP

Name Object Oriented Programming

**Study year** 2022-2023

ECTS credits 2

LanguageDutch, with parts in EnglishCoordinatorM.S.R. van Noordennen

Modes of delivery Lecture

Practical / Training

**Assessments** Object Oriented Programming - Skills test

### **Learning outcomes**

- The student creates (dynamic) data structures such as:
  - enumerations
  - records
  - o dynamic arrays.
- The student creates an object oriented program that carries out a given task by:
  - using basic object oriented programming skills
  - using the principles of information hiding and encapsulation (classes/objects/public vs private)
  - using the inheritance mechanisms (implements, extents).
- The student creates a structured program by:
  - using standard libraries
- The student creates a structured program which is:
  - o user friendly
  - scalable
  - o maintainable
- The student creates a robust programs by implementing techniques such as:
  - o test programs
  - o exception handling
  - debugging.

#### Content

This module is centered around object oriented programming. Next to the specific programming skills and practices around structured programming, you will learn about how to write a program that is robust and modular.

You will also learn how to deal with large (dynamic) amounts of data. In contrast to year 1 we will be using Java as the programming language which will help you diversify your programming skills. The object oriented programming skills covered in the learning outcomes are however applicable to other programming languages.

## Included in programme(s)

Electrical Engineering Major Electronics Electrical Engineering Major Mechatronics

## School(s)

Institute of Engineering