

Course

ELEC-A7151

Course materials

Your points

Code

Code Vault

MyCourses

Teams Channel

This course has already ended.  
The latest instance of the course can be found at: [Object oriented programming with C++: 2023 Autumn](#)

ELEC-A7151 / Course materials

## Getting Started

Friday, 10 September 2021, 07:59 – Friday, 31 December 2021, 19:59

- Development environment
- Exercises
- Common problems

## Module 1: Basics

Tuesday, 14 September 2021, 07:59 – Friday, 8 October 2021, 19:59

- Introduction
- Namespaces
- I/O streams 15 / 15
- Strings and vectors 25 / 25
- Classes and objects 55 / 55
- Round feedback 5 / 5

## Module 2: Containers

Tuesday, 14 September 2021, 08:00 – Friday, 8 October 2021, 19:59

- Introduction
- Sequential containers
- Iterators 65 / 65
- Associative Containers
- Summary on containers
- Algorithms 30 / 30
- Round feedback 5 / 5

## Module 3: Classes and Object-oriented Programming

Friday, 24 September 2021, 19:59 – Friday, 8 October 2021, 19:59

- Introduction
- Object-oriented programming
- Object relationships in C++ 15 / 15
- Operator Overloading 30 / 30
- Dynamic Memory in C++ 25 / 25
- More about dynamic memory 25 / 25
- Round feedback 5 / 5

## Module 4: Organization and Utility Constructs

Friday, 1 October 2021, 19:59 – Friday, 15 October 2021, 19:59

- Introduction
- I/O in C++ 50 / 50
- Generic programming using templates 20 / 20
- Smart pointers and resource management 25 / 25
- Round feedback 5 / 5

## Module 5: Advanced Topics

Monday, 4 October 2021, 19:59 – Friday, 22 October 2021, 19:59

- Introduction
- Exception handling 70 / 70
- Lambda expressions 20 / 20
- Learning environment survey 5 / 5
- Round feedback 5 / 5

## Module 6: Software Projects

Monday, 18 October 2021, 07:59 – Friday, 17 December 2021, 19:59

- Introduction
- Project guidelines
- Project topics and descriptions
- Recommended libraries

## Software development tools

Tuesday, 14 September 2021, 08:00 – Friday, 17 December 2021, 19:59

- Built automation tools
- Software libraries
- Git
- Valgrind

questionnaire

30 / 30



submit

470 / 470

