

# Intellectual Output 1

A4 Module development  
MODULE CONTENT 1



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This module focuses on the concept of copyright. This is a widely known type of IP as most people generally understand its purpose and use when asked in surveys. However despite this fact copyright violation is still a common case in everyday practice, especially in the use of resources and materials found on internet, e.g. when sharing music, videos, photos, books, software etc. In this module and proposed lesson plan we address them in the subject of robotics and in general entrepreneurship.

After completing this module, you will be able to:

- acquire practical understanding of what copyright is and how relevant and important copyright and in general IP property protection are in the fields of technology and entrepreneurship.
- be able to identify common wrong doings and bad practices of copyright violation but also best-practices on how to protect and acknowledge copyright.

Estimated seat time: about 45 minutes or equivalent of one standard classroom hour is needed to complete this module in a classroom of 20-25 students.

## 1.1 Main Content

### 1.1.1 Terms and Definitions

As defined by the World Intellectual Property Organization, the European Union Intellectual Property Office and elaborated at the Greek Copyright School Project of the Hellenic Copyright Organization, copyright or author's right is a legal term used to describe the rights that creators have over their creations and works. Works covered by copyright range from books, novels, plays, poetry, music, songs, paintings, drawings, sculpture, photographs, videos and films, to computer programs, databases, advertisements, textile designs, architectural plans, maps, and technical drawings, just to name a few.

Copyright is one of the most widely-known intellectual property rights and its purpose is to protect any product of the human mind, provided that this is original and is not just an idea or thought but it materializes in some form. Copyright law grants the creator exclusive rights to determine whether, and under what conditions, his or her original work may be used by others. It gives the owner two rights, economic and ethical, moral. The former is the right to control the reproduction of the work, the communication of the work to the public, its translation, adaptation, distribution and resale. It grants the creator long-lasting protection to reward him or her and at the same time, to make sure that his or her family can enjoy the economic benefits from the work and its success. Ethical rights refer to be recognised as the author of an original work., to have the name of the creator indicated, to protect the integrity of the work from alteration and distortion. It is commonly accepted that moral rights have no limits in time.

Copyrights do not require any registration requirement for protection. The protection exists from the moment a work is created. In some countries, optional registration processes are available. The protection period of copyright is generally very long. In the EU, protection lasts for the lifetime of the author plus 70 years after his or her death.

It should be noted that copyright is territorial. This means protection is granted on a country-by-country basis. However, international conventions exist that contain minimum rules for copyright protection applicable to countries all over the world.

There are exceptions to copyrights and works can be used without the consent of the author or the rights holder mainly for purposes such as:

- the use of extracts for the purpose of illustration for teaching or scientific research
- the use of short quotations from a work for the purposes of education, criticism or review
- the reproduction of a work for private use

The World Intellectual Property Organization and the European Union Intellectual Property Office have published online Frequently Asked Questions (FAQs) to inform the public about what is legal and what is not as far as the usage of copyright and related rights-protected content on the internet is concerned. These can be found through the following links:

WIPO FAQs on copyright at [https://www.wipo.int/copyright/en/faq\\_copyright.html](https://www.wipo.int/copyright/en/faq_copyright.html)

EUIPO FAQs on copyright at <https://euipo.europa.eu/ohimportal/en/web/observatory/faqs-on-copyright%20>

## **Robotics**

A comprehensive and concise definition of the term can be found in Wikipedia – The Free Encyclopedia. Robotics is an interdisciplinary field that integrates computer science and engineering. It involves design, construction, operation and use of robots. The goal of robotics is to design machines that can help and assist humans. Robotics integrates fields of mechanical engineering, electrical engineering, information technology, computer engineering, electronics, bioengineering and biomimetics among others. Robotics develops machines that can be programmed to automate and replicate actions that resemble the ones of humans, animals or insects. Robots can be used in many situations and for many practical purposes and especially in environments that pose certain threats to humans, such as in hazardous environments due to heat or cold, radiation, pollution, high levels of noise, in remote areas as in space or underwater. Robots can generally be designed to take on any form required by functionality and use case. In many cases their form is inspired by nature and they are made to resemble humans, animals or insects in appearance.

### **1.1.2 Practical examples**

Below is shown a representative example of a humanoid robot called NAO which is a product of a company called Softbank Robotics. As a practical example we list what can be protected by copyright:

- the photo of the robot
- the overall visual design of the robot
- the name of the robot
- the name of the company
- the software that controls the robot
- the manual to operate the robot
- the sounds that the robot can make
- the music or songs that the robot can play
- the engineering drawings of the robot
- a choreography or distinctive movements that the robot can perform
- a film or video where the robot appears
- a series of animated characters or figures of the robot composing a video game, a tabletop game set or comics book
- the video game, tabletop game set or comics book
- the set of gadgets or extra components for the robot



*Image 1: Humanoid robot NAO of Softbank Robotics*

*Source: <https://www.softbankrobotics.com/>*

### **1.1.3 Case studies**

In the lesson plan that accompanies this module the main case that students work on is first to search the web to find companies or products related to the field of robotics and make a presentation. They can consider several variations regarding their role and the purpose or use of their presentation. Namely,

- in case 1, they are students and their presentation is for educational purposes. In this case they have to acknowledge copyright of any material used by indicating their sources and they do not need to ask for consent from the copyright holder.

- in case 2, they are individuals and their presentation is for private use. The same applies as before

- in case 3, they are individuals who write a book about robotics which then it will be published and sold. In this case for any materials they need to ask permission by the copyright holder.

- in case 4, they are professionals working in a company which is competitor to the one that produces the robot that appears in the presentation. To be able to produce the robot they need to hold the relevant copyrights (see list in section Practical examples). To do so their company needs to go through the appropriate legal process with the other company/IP rights owner to get all permissions and licenses that are required according to copyright rules and in general IP law so that it can produce the robot. If not done, then there is infringement of copyright and IP rights.

## 1.2 Knowledge Assessment

The following list of questions can be used to check the learners' knowledge acquisition. Correct answers are marked in bold.

Question 1:

Copyright is a legal term and a type of IP [False] **[True]**

Question 2:

In the EU, copyright protection lasts for the lifetime of the author plus 70 years after his or her death [False] **[True]**

Question 3:

Copyrights do not require any registration requirement for protection **[True]** [False]

Question 4:

Copyright protection exists from the moment an idea is created [True] **[False]**

Question 5:

Copyright protection exists from the moment a work or production based on an idea is created **[True]** [False]

Question 6:

Copyright gives the owner only economic but not moral rights [True] **[False]**

Question 7:

Copyright is territorial, i.e. protection is granted on a country-by-country basis. **[True]** [False]

Question 8:

To obtain protection by copyright the work or production must be a copy of an original [True] **[False]**

Question 9:

Works can be reproduced or used without the consent of the author or the rights holder mainly for educational and scientific purposes or for private use **[True]** [False]

Question 10:

Works covered by copyright include music, songs, videos, films, photos, computer programs and many more **[True]** [False]

### 1.3 Skills Assessment

An exercise or homework project assignment that promotes problem solving and critical thinking related to the concept of copyrights and in general of IP protection can be the following. Students take on a survey study of friends and relatives about common bad or good practices of copyright protection and violation as everyday users of internet resources. They may design a questionnaire with a number of key questions to distribute and collect responses which then analyze and present the results to draw their conclusions.

### 1.4 References or additional resources

World Intellectual Property Organization (WIPO)

<https://www.wipo.int/about-ip/en/>

<https://www.wipo.int/copyright/en/>

[https://www.wipo.int/copyright/en/faq\\_copyright.html](https://www.wipo.int/copyright/en/faq_copyright.html)

European Union Intellectual Property Office (EUIPO)

<https://euipo.europa.eu/ohimportal/en>

<https://euipo.europa.eu/ohimportal/en/web/observatory/faqs-on-copyright%20>

Greek Copyright School Project of the Hellenic Copyright Organization (HCO)

<https://copyrightschool.gr/index.php/en/teachers>