

Standard Teachease Plan

FOR GRADES 3-6



Coding and robotics for upper primary

Teachease plan

Background

This document describes the **Teachease™** service designed for **grades 3-6**. The Teachease service offers **teacher training, teaching materials** and **on-going support** for implementing a high-quality digital skills program that offers a coherent learning path for students regardless what grade they are on. Teachers do not need any prior experience of coding or robotics.

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Recommended content for grades 3-6

For an optimal and pedagogically sound learning path for grades 3-6 we recommend the ***Coding and robotics for upper primary*** package that contains four learning modules.

Age group/ Grades	Package name	Description	Learning modules
3-6	Coding and robotics for upper primary	<p><i>Coding and digital creation in the context of design-based project learning and STEAM.</i></p> <p><i>Students use Scratch and MakeCode for the coding tasks.</i></p> <p><i>Creativity, collaboration, communication and critical thinking are highly promoted.</i></p>	3 Code & Create 4 Automate 5 Computate 6 Develop & Test

Implementation plan

We suggest a gradual implementation by introducing one or two new learning modules each year. This approach minimises the upskilling need of teachers while offering a motivational learning path for all students.

	Year 1	Year 2	Year 3 and onwards
3 Code & Create	3-6	3	3
4 Automate		4-6	4
5 Computate		5-6	5
6 Develop & Test			6

During the first year of implementation, all students in grades 3-6 study Code&Create. New learning modules are then introduced the following years to provide a progressive learning path.

On-going services

For each school year, your school subscribes to **Teachease subscription**. This subscription provides training and material for new courses every year. In addition, your teachers can talk to our support team and get personal assistance for any questions or challenges.

After having an active Teachease subscription for at least one year, your school has the option to switch to **licence-only subscription**. This ensures your teachers can keep using the courses implemented so far, but they will no longer get any new content or support.

Service feature	Teachease subscription *)	Licence-only subscription **)
Number of teachers	Up to 20	Up to 20
Teachers' online courses	Included	No
Teacher training with live Code School instructors	Included	No
Training recordings	Included	No
Student books	Included	Yes
Teacher materials	Included	Yes
Assessment tools	Included	Yes
Coding clinics	Two per year	No
Remote coding classes	Two per year	No
Online support	Weekdays office hours	No
Digital badges and certificates	Included	No

*) Renewed annually.

**) Available after first year of service

Pricing for subscription options is available upon request.

Appendix

1: Code School Finland's curriculum synopsis

These are the learning goals for grades 3-6 in Code School Finland's curriculum.

Goals for grades 3-6:

Students learn the basics of coding by creating interactive stories and games in Scratch. Students learn the basic concepts in automation and study components of embedded systems. Students design STEAM projects by creating coded art and modelling scientific phenomena digitally. They learn safe practices of using technology and the internet.

Students continue coding in Scratch creating educational games for younger students through the design process, integrating their projects to a subject area.

Comments:

Project-based learning is an engaging way to learn about digital creation and the basics of visual coding. For robotics, schools can select to use Lego Spike kits or Micro:bits. At this level, coding, digital creation and robotics are closely tied to subject areas such as maths, art and science.

Appendix

2: Description of the learning modules

Grade 3

Programming, digital creation



Code & Create

24
lessons

Create interactive stories and maze games

Keywords: Scratch, loop, condition, conditional statement, project, design, game development, cooperative creation, creativity



Description:

This course introduces students to the world's most popular visual programming environment - Scratch; with plenty of hands-on practice for creation of **interactive stories**. Students design and implement their **own maze game** with a goal, score calculation, an enemy and obstacles, and more.

Promotes:

- Understanding how code is used in context of digital projects such as apps and games
- Skills in multimedia creation, digital art, and game making
- Creativity, collaboration, giving and receiving feedback, reflection, exploration

Grade 4

Automation, robotics

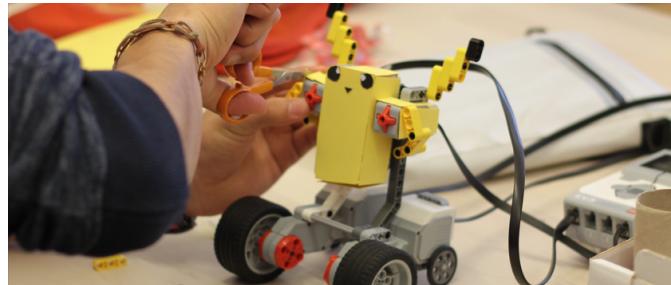


Automate

24
lessons

Design alarm automation and intelligent robots

Keywords: Micro:bit, Lego Spike, sensor, actuator, processor, embedded system, automation, variables, functions, tinkering



Description:

Automate is an introductory robotics course. Students learn basic concepts of automation and components of embedded systems. Students design and build **sensor-activated alarms for an interactive game**, combine mechanics with programming, and programme **intelligent robots**.

Promotes:

- Understanding how coding is used to automate actions in automation and robotics
- Skills in physical creation and embedding computers into self-crafted creation
- Creativity, collaboration, giving and receiving feedback, reflection, exploration

Grade 5

ICT, Media literacy



Computate

24
lessons

AI

Diving into the **world of technology, media literacy and security** through media projects

Keywords: Internet, computer, security, technology, media, media literacy



Description:

Computate module introduces multiple ways to integrate coding, design process, and media skills into classroom activities, projects, and individual subjects. The module comprises three projects with the following topics: **Safe use of technology and internet**, **Coded art** and **Science with coding**.

These activities and projects build excellent opportunities for multidisciplinary learning.

Promotes:

- Understanding of the principles of using technology and internet safely and respectfully
- Recognising the patterns and structural iteration in the world
- Searching, structuring, and analysing information, making reasonable conclusions based on data
- Adopting routines for innovating, collaboration, reflection, and exploration

Grade 6

Programming, design



Develop & Test

24
lessons

Create your own **learning game** through an iterative **design process**.

Keywords: Scratch, variable, boolean logic, project, product design, development process, game design, cooperative creation, creativity



Description:

This course focuses on the most relevant computational thinking concepts such as loops, conditional statements, and variables. Students design and implement **an educational game for younger peers**. Students test their games with the target group and get feedback on product development.

Promotes:

- Work life skills: collaboration, work life processes, and product design
- Creativity and exploration: Skills in multimedia creation and digital art
- Design thinking: Implementation of game design and design process

Our partner schools' feedback

The implementation of Teachease has been smoother than anticipated, especially when it comes to teacher qualification. It was a hands-off experience for management.

Westlake International School, MALAYSIA

The training is very comprehensive for all abilities. The teacher trainers are very friendly and approachable.

Grade 4 community school teachers, IRELAND

Code School Finland and their materials really arise students' interest in programming in an educational and inspiring way.

IT Teacher, Backaskolan, SWEDEN

Students work on their project by themselves with minimal instructions from the teachers. The materials make it possible for the students to learn by doing through the well-designed creative projects.

Ritsumeikan Moriyama High School, JAPAN

