STEM CODING | SECONDARY SCHOOL

STEM CODING MAX
Hands-on and problem-based construction and programming in secondary school

In a self-directed and app-guided manner, students learn how to handle everyday tasks, starting with simple basic exercises and progressing to more complex circuit challenges. Using an easy-to-operate controller, a range of practical sensors and actuators, an intuitive programming app, and high-quality fischertechnik components, they tackle tasks from their everyday lives. This hands-on and problem-based learning approach promotes technical, methodological, personal, and social competencies at various levels. Digital competencies and basic programming knowledge are essential components of secondary education today. With STEM Coding Max, this foundational education can be acquired through engaging and didactically prepared everyday examples.

LEARNING OBJECTIVES

Realizing everyday tasks in Information Technology and Robotics

Transferring conceptual models to everyday applications

Developing technical, methodological, personal, and social competencies

Learning program sequences and basic computational structures

Learning block- and text-based programming for an easy-to-use controller

Understanding and applying the functions and interconnections of actuators and sensors

Pre-vocational orientation in mathematical, scientific, technical, and/ or informational directions

STEM **MINT** MATHEMATIK INFORMATIK NATURWISSENSCHAFT TECHNIK
SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS

Klett MEX

scratch

Built on Blockly

python

MINT Kit STEM Coding Max
Facts

👥 2 - 4 students

🏗️ 11+4 models

🧩 243 pieces incl. replacement parts and sorting template

🕐 42+ Hours of Learning

⚙️⁺ Inkl. RX Controller, color sensor, gesture sensor, proximity sensor, brightness sensor, magnetic switch, 2 motors, 3 LEDs, 4 buttons, USB-C 9V battery

🖥️ For teachers: Free access to comprehensive teacher support materials incl. lesson plans and curriculum references on www.fischertechnik.de/schools

📖 For students: Interactive tasks, tutorials, step-by-step building and coding instructions in fischertechnik app "STEM Suite" (available for free download for iOS, Android, Windows and macOS

Art. no.	571906
EAN	4048962516678
Dim. (mm)	440x315x150

Hands-on learning concepts for regular classes
with fischertechnik educationrricht

fischertechnik education offers innovative digital and analog learning concepts for use in many different subjects – in preschools, general education schools, as well as universities and vocational education. STEM (science, technology, engineering and mathematics) content is taught in an accessible and concrete way based on hands-on learning concepts. This helps students learn important future skills like problem solving, creative thinking, and emotional and social competence.

From robotics to artificial intelligence to automated, agile production simulators and the fundamentals of renewable energy sources, electronics and mechanics – the fischertechnik product range includes solutions to teach STEM content relevant to your curriculum.

All learning concepts contain themed building kits, technical components like motors, sensors, and controllers, and freely accessible accompanying instructional and training materials, in the form of building and programming instructions, lesson plans with tasks and solutions, curriculum references and continued training.

Our solutions have been used successfully all over the world for over 50 years in schools, universities, vocational training programs and industrial companies.

More information on our learning concepts is available at:
fischertechnik.de/schools

FISCHERTECHNIK MINT KITS

Our **STEM Kits** are optimized for project-based work in continuing education schools, and coordinated to current curricula in Germany. Each STEM kit deals with a specific technical topic from a STEM area.

The **building set** contains a set of parts students can use to build several different models and conduct experiments. Thanks to **teaching materials available online**, incl. learning objectives, curriculum references, tasks and solutions, using the sets in STEM instruction is easy.