





INCURSION PROGRAMS

Hands-on Learning Through Fun Digital Tech!

Bring Junior Engineers' to your school: our huge range of incursion options will engage, excite and inspire your students about the future possibilities of our ever-changing digital world.

Our programs are designed by qualified teachers, and delivered by Australia's best and brightest STEM thinkers with science and/or education backgrounds. Our secret ingredient is **FUN**: we'll make sure your students' exposure to the Digital Technologies curriculum blows their minds, and helps them practice problem-solving, collaboration, creativity and practical application of new skills.

Why Junior Engineers Incursions?

-  **Meaningful, FUN content:** Kids learn best by DOING! We're experts in teaching hands-on digital technologies curriculum to kids. Our age-appropriate curriculum suits absolute rookies to seasoned coders and every level in between.
-  **Real world skills:** Students hone a wide range of in-demand skills for the workforce of the future: coding, problem solving, logical & critical thinking, creativity and collaboration
-  **No preparation required!** Junior Engineers supplies all teaching resources, curriculum tools and a team to deliver the program - no parent helpers required.
-  **Learning outcomes guaranteed:** Students are well supported by our blue-card carrying qualified instructor team, with a 1:9 ratio for classroom-based incursions.

Who is Junior Engineers?

Junior Engineers are leading Australian providers of digital technologies, coding and robotics education. Since 2013, we've partnered with schools across the country to deliver super-engaging STEM programs with our leading, trained instructor workforce.

*We'll help you teach
the kids of today the
skills of tomorrow.*



LEARN MORE ABOUT INCURSIONS

-  juniorengineers.com.au/for-schools
-  1300 089 344
-  partnerships@jnrengineers.com



Proudly brought to you by **Junior Engineers**

Incursion curriculum at a glance

Choose from pre-built programs, or design your own incursion using our proprietary curriculum below.

Block Coding	Text Coding	Robotics	Creative
SCRATCH GRADES 02-06 RANGE BEG-INT	PYTHON GRADES 04-10 RANGE BEG-ADV	ARDUINO GRADES 07-10 RANGE INT-ADV	APP PROTOTYPING GRADES 02-10 RANGE BEG-INT
MINECRAFT GRADES 02-06 RANGE BEG-INT	ROBLOX GRADES 04-10 RANGE INT-ADV	MICRO:BIT GRADES 02-06 RANGE BEG-INT	STOP MOTION GRADES 02-06 RANGE BEG-INT
MINITENDO GRADES 02-06 RANGE BEG-INT	JAVASCRIPT GRADES 04-10 RANGE BEG-ADV	LEGO MINDSTORMS GRADES 02-06 RANGE BEG-INT	STEM EXPLORERS GRADES P-2 RANGE BEG

Most popular programs

 <p>CODEMONKEY</p> <p>Gamified block or text-based coding program where animated characters teach core coding concepts and application through a series of challenges.</p>	 <p>CODE WITH MINITENDO</p> <p>Hands-on mechatronics and gaming workshop, using block-based coding to create and play classic games. Uses MakeCode Arcade and Minitendo Pybadge hardware.</p>	 <p>APP PROTOTYPING</p> <p>Students harness big ideas and ideate on real-world problems; they then develop a working app prototype using MarvelApp and pitch their idea to their classmates.</p>	 <p>CYBER ESSENTIALS</p> <p>Learn essential skills, and techniques to thwart malicious attacks. Test knowledge through interactive Cyber protection activities.</p>
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How do incursions work?

Step 1

Choose a curriculum, and decide length of incursion. **Half day**, full day and multi-day programs available

Step 2

Delivery mode and attendees – we'll work with **Head of Departments** and curriculum leads to design the program to fit in with your school timetable. Delivery for Class, Year Level, or get the whole school involved

Step 3

Formal quote issued/accepted

Step 4

Supply of **risk assessments**, insurance information and blue card details for activities and instructors

Step 5

PROGRAM DELIVERY



“One of my students said it was her “best day EVER!” The children were so engaged in the program, and it was so hands-on and fun for them to create and develop their own games. I don't think they realised they were actually learning!” Grade 3 Year-Level Coordinator.



Sample schedule: 90 minute Year Level incursion; half-day total

Up to 120 students in 2 sessions taught by 6 instructors

Session timings tailored to campus bell times.

Day 1

Morning (9.15–10.45)	Cohort 1 in 2 Groups
Middle (11.15–12.45)	Cohort 2 in 2 Groups

Curriculum options: Minecraft Education, Scratch, Micro:Bit or CodeMonkey

Sample Schedule: 1-day Full Year Level multi-topic program

250 students spread across 12 classrooms running simultaneously

Students learn Minitendo, Python then choose an elective program (JavaScript or Minecraft) for the last session.

Day 1

Morning	Intro to the day Minitendo Python
Middle	Python continued Elective: Javascript and Minecraft options
Afternoon	Elective continued

Sample Schedule: 2-day Full Year Level Innovation Summit

Day 1

Morning	Design Thinking
Middle	App Ideating
Afternoon	Personas & Identity

Day 2

Morning	Scenarios & Wireframing
Middle	Prototyping & Testing
Afternoon	Pitch App to Class "investors"



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