



JSS STEM Elective 2027

S2 MTP & SOE, 8 May 2026



What pathways are available for JSS students who have developed strong interests in ALP skills like Design Thinking, coding and 3D printing, as they progress to upper secondary?



JSS DESIGNED CURRICULUM

Purposefully designed to develop 21st Century Competencies through authentic learning experiences that are meaningful, relevant and future-oriented.



DEEP LEARNING



REAL-WORLD CONNECTIONS




INTERDISCIPLINARY APPLICATION





VALUES-DRIVEN LEADERSHIP




THE BANI WORLD


BRITTLE


ANXIOUS


NONLINEAR


INCOMPREHENSIBLE

STUDENT OUTCOMES
Every Student A Success Story

Adaptive Thinker

- *Curious*, open to diverse perspectives and contexts
- *Cognitively flexible*, responds nimbly

Confident Person

- Keen *awareness* of one's own strengths and potential
- *Courageous*, voicing and exchanging ideas spontaneously, *responsibly* and *respectfully*

Persevering Learner

- *Determined*, takes calculated risks and persists through failure
- *Reflective*, has the will to act and to strive for excellence


Concerned Citizen


- *Empathetic and caring*, committed to the betterment of our community
- *Rooted* to Singapore, when engaging with global and social issues

DESIGN THINKING APPROACH, INTERDISCIPLINARY


Empowering students to think critically, be inventive and solve real-world problems through an iterative and empathetic process.


EMPATHISE
Understand people and their needs







DEFINE
Identify the right problem to solve







TEST
Evaluate, learn and improve






IDEATE
Generate many ideas and possibilities





PROTOTYPE
Create and with solutions



COLLABORATE • INNOVATE • IMPACT

JSS STEM ELECTIVE

AIMS TO:

01 DEVELOP 21ST CENTURY COMPETENCIES

particularly critical and inventive thinking



02 STRENGTHEN STEM LITERACY

through real-world, localised problem contexts



03 PROVIDE EXPOSURE TO

engineering design, data thinking, and computational thinking **without being syllabus-heavy**



OUR GOAL:

Empowering every student to think critically, solve real-world problems and create meaningful solutions for a better future.



Why Choose This Elective?

Become a Creator of Smart Solutions: Moving beyond written assessment, this elective prioritizes future-readiness by developing competencies that align with students' post-secondary aspirations.

Freedom to Experiment: Students are given the freedom to imagine possibilities and experiment in an environment where innovation and risk-taking are encouraged.

Industry Connection: Gain possible unique exposure through industry awareness sessions, vendor workshops, and work attachments with industry partners



What will students be experiencing?

