

# The what of STEM

# What is STEM?

**Science**

**Technology**

**Engineering**

**Mathematics**

‘Stem education is an interdisciplinary approach to learning that **removes the traditional barriers** separating the four disciplines’

Vasquez, J., Sneider, C., & Comer, M. (2013). *STEM lesson essentials, grades 3–8: integrating science, technology, engineering, and mathematics*. Portsmouth, NH: Heinemann.

‘... a cross disciplinary approach to teaching that **increases student interest** in STEM-related fields, and **improves** students’ problem solving and critical analysis skills.’

*National STEM School Education Strategy*  
Education Council, 2015

**Science**

**STEM**

**Mathematics**

**Technologies**

\* Design and Technologies

\* Digital Technologies

Problem/need  
/opportunity/  
situation

**STEM  
education**

**CONTENT  
KNOWLEDGE**

**INQUIRY  
PROCESS**

**SCIENCE**

**MATHEMATICS**

**DESIGN AND TECHNOLOGIES**

**DIGITAL TECHNOLOGIES**

**SCIENCE INQUIRY SKILLS**

**CREATING DESIGNED SOLUTIONS**

***STEM should not  
comprise nor add to  
existing curriculum  
but be considered as  
an alternative delivery  
of the curriculum***

[STEM Integration: Teacher Perceptions and Practice, Journal of Pre-College Engineering Education Research \(J-PEER\)](#)

Victorian Curriculum and Assessment Authority



# Victorian Curriculum

## Foundation–10

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