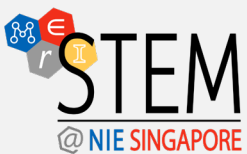


2nd run

Certificate in **STEM** Curriculum Development Programme

Contact person: A/P Teo Tang Wee
tangwee.teo@nie.edu.sg



An Institute of



Structure



An Institute of



Certificate in STEM Curriculum Development Programme

INS4422

Principles of STEM
Curriculum Integration

3 AUUs

INS4423

Approaches and Emerging
Technologies in STEM
Education

4 AUUs

INS4424

Designing an integrated
STEM Education Portfolio

1 AUUs

8 AUUs

INS4422 Course Content



An Institute of



Module	Module Title	Online Asynchronous Week Beginning	Online Synchronous Week Beginning
1	Origins of STEM Education	3 April 2024	10 April 2024
2	Successful STEM Education	17 April 2024	24 April 2024
3	STEM Education in Asia	1 May 2024	8 May 2024
4	The role of Science in STEM Education	15 May 2024	22 May 2024
5	Integrated STEM Framework	29 May 2024	5 June 2024
6	MOE STEM Education for Singapore	12 June 2024	19 June 2024
7	Consolidation		26 June 2024
		18 hours	21 hours

Once a week and 3h per session

INS4423 Course Content



An Institute of

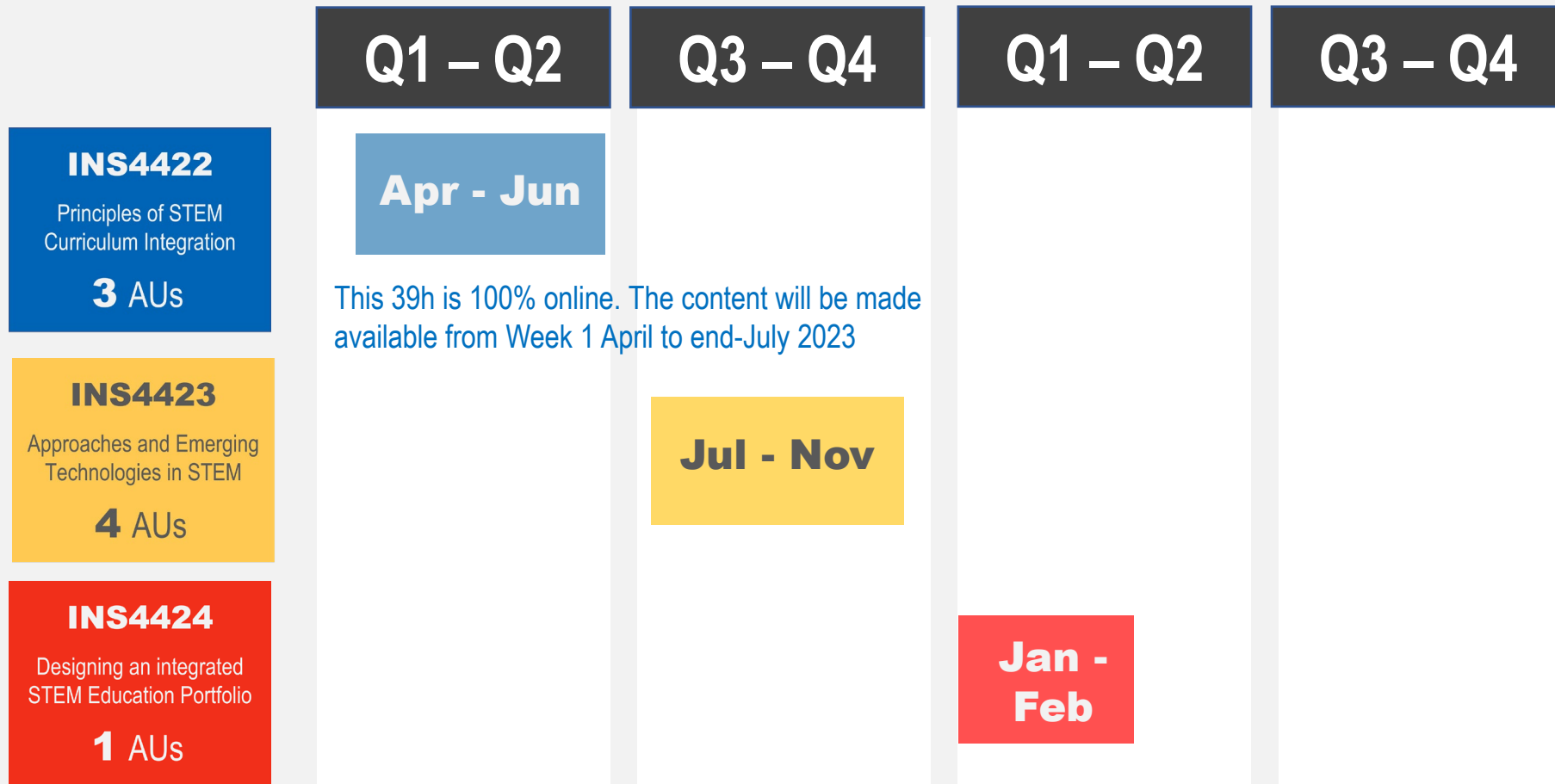


No.	Topic	Dates	Format
1	Introduction to Emerging Technologies in STEM and its applications	24 July 2024	Face-to-face @M38, 3-6pm
	Digital coding to create aesthetic designs		
2	Digital coding to create aesthetic designs	31 July 2024	Face-to-face @M38, 3-6pm
3	Digital literacies - Halocode	7 Aug 2024	Face-to-Face @NIE, 3-6pm; 1h HW
4		14 Aug 2024	Face-to-Face @NIE, 3-6pm; 1h HW
4		21 Aug 2024	Face-to-Face @NIE, 3-6pm; 1h HW
5	Cognitive processes in STEM inquiry- Computational thinking	28 Aug 2024	Face-to-Face @NIE, 3-6pm
6		4 Sept 2024	Face-to-Face @NIE, 3-6pm
7	Sustainability - 3D printing	11 Sept 2024	Face-to-Face @NTU, 3-6pm
8	Sustainability - 3D printing	18 Sept 2024	Face-to-Face @NTU, 3-6pm
9	Sustainability - 3D printing	25 Sept 2024	Face-to-Face @NTU, 3-6pm
10	Sustainability and Urban farming	2 Oct 2024	Face-to-Face @NIE, 3-6pm
11	Sustainability and Urban farming	9 Oct 2024	Face-to-Face @NIE, 3-6pm
12	Sustainability and Urban farming	16 Oct 2024	Face-to-Face @NIE, 3-6pm
13	Generative AI	23 Oct 2024	Face-to-Face @NIE, 3-6pm
14	Generative AI	30 Oct 2024	Face-to-Face @NIE, 3-6pm
15	Cospaces	6 Nov 2024	Face-to-Face @NIE, 3-6pm
16	Self-learning: Entrepreneur thinking, engineering thinking, design thinking	13 Nov 2024	Asynchronous

Illustration of Completion within 11 months

Year **2024**

Year **2025**



Q1: Jan-Mar; Q2: Apr-Jun; Q3: Jul-Sep; Q4: Oct-Dec

Entry Requirements



An Institute of



MOE Schools

- Current STEM-related subject teachers (namely, Sciences, Mathematics, Computing, Design & Technology, Nutrition and Food Science);
- Teachers with minimum two years in service; and
- Letter of nomination from their school leaders

Non-MOE Schools

- Current STEM-related subject teachers (namely, Sciences, Mathematics, Computing, Design & Technology, Nutrition and Food Science); and
- Minimum two years of STEM education (e.g., curriculum design, teaching, etc.) experience.
- Letter of support from their employers/school leaders

Programme Fees

*MOE Participant	Non-MOE Participant
\$1,300	\$5,980

Fees are subjected to copyright fee and GST.

*MOE Participant may be eligible for funding by the Ministry of Education (MOE).

Application



An Institute of



Apply Now



Closing date: 13 Nov 2023



Please email your letter of nomination/support from your employers/school leaders to shafiqah.raihan@nie.edu.sg.

FAQ

1. Is the MOE sponsorship on first-come-first-serve basis?
 - No, it isn't. We will review the applications (including the write-up) in making the selection. We will also ensure equitable distribution of opportunities across schools.
2. My school is an autonomous/independent school. Am I eligible for the MOE sponsorship?
 - The sponsorship is for MOE schools (including autonomous), HQ officers and AST officers. Alternative funding include school's PD funds and self-funding.
3. If I register for this Programme, how do I attend lessons in the afternoons on weekdays?
 - Alternative arrangements will have to be made at the school level. The Principals' letter of support as indication of commitment to the teacher's PD growth is important in this context.

FAQ

4. What happens if the sponsored teacher cannot cope halfway and ask to withdraw from the course? Will there be any penalty?

The teacher has attended >30% of the course duration	A “W” grade will be awarded. Required to pay full course fee.
The teacher has attended <30% of the course duration	A “W” grade will be awarded. Not required to pay full course fee.

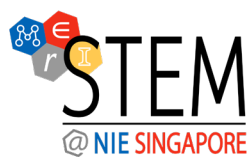
5. What is the penalty for me if I am sponsored by MOE and cannot complete the programme?

- Cases of teachers being unable to complete certification courses would likely be rare as these teachers would have made a commitment and sought support from their school before embarking on the certification.
- If there are such cases, MOE will review on a case-by-case basis (ideally in their 4th year for sufficient lead time for engagement).

FAQ

5. Can I take the courses as stand-a-long in service course?
 - Yes. However, we have a quota of 30pax for each cycle. Registration for inservice is open after we have confirmed the Programme participants.
6. What if I am not sure if I can commit to completing the Programme?
 - Consider taking the courses as stand-a-lone course and stack them toward a Certification programme within 5 years.

Certificate in **STEM** Curriculum Development Programme



An Institute of

