

Day 3: 8th October 2026

Module 3: Fundamentals of Nuclear Engineering for SMRs

	Speakers: Local expert 1 – IAEA, CU, TINT Local expert 2 – IAEA, CU, TINT Location: KX Building, Bangkok
9:00 - 9:20	– Welcome and course introduction (20 min)
9:20 - 9:30	– Pre-test (10 min)
9:30 - 10:30	Session 1: Nuclear fundamentals – Fundamentals of reactor neutronics and chain reactions (60 min)
10:30 - 10:45	Coffee break
10:45 - 12:00	– Fundamentals of reactor thermal hydraulics and heat removal (75 min)
12:00 - 13:00	Lunch
13:00 - 14:00	Session 2: SMR technology characteristics – Reactor behavior and safety from first-principles engineering perspectives (60 min)
14:00 - 15:00	– Cross-cutting characteristics of SMR technologies (modularity, passive safety, simplified systems, operational flexibility) (60 min)
15:00 - 15:15	Coffee break
15:15 - 16:15	– Overview of reactor safety analyses and computer codes used in the analyses for licensing of nuclear reactor designs (60 min)
16:15 - 16:30	– Post-test (15 min)