

UMass Turing Summer Program 2025

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	July 7	July 8	July 9	July 10	July 11
	Day 1 (All)	Day 2 (Tammy)	Day 3 (John)	Day 4 (Hetvi)	Day 5 (Jorge)
9:30 AM - 11:00 AM	Student check-in Program Intro, Prashant/Lilly/Emmanuel	Lecture: Body Area Networks for Mobile Health Jeremy Gummesson	Lecture: Intro to Robotics Hao Zhang (Oscar)	Show and tell: Compute and Network Devices Emmanuel/Mary/Sri/Bala	Lecture/lab: Enabling Health with Wearables Ivan
11:00 AM - 12:00 PM	Icebreaker: Spaghetti Tower Tammy/Adam/All	Lab: Sensor Data Exploration with Low Power Sensors Jeremy Gummesson	Lab Tour: Human-Centered Robotics (HCR) Hao Zhang (Oscar)	(*)Scripted Lab: Step Count Hetvi/Mary/Sri/Bala	Lecture: Cloud Computing Lilly
12:00 PM - 1:30 PM					
1:30 PM - 2:30 PM	Lecture: Introduction to CS, Adam	(*)Lab: Getting Started with Python - Variables, Tammy/Bala/Sri	(*)Lab: If-else condition, John/Prathik/Ayush	(*)Lab: Loop, Nathan/Mary/Sri/Bala	(*)Lab: Lists/Arrays/Sets Jorge/Prathik/Ayush
2:30 PM - 3:30 PM	(*)Lab: Introduction to Computer Programming, Walid	(*)Lab: Getting Started with Python - I/O Tammy/Bala/Sri	(*)Lab: If-else condition (con't), John/Prathik/Ayush	(*)Lab: Loop (cont) Nathan/Mary/Sri/Bala	(*)Lab: Lists/Arrays/Sets (cont) Jorge/Prathik/Ayush
3:30PM - 4:00 PM					
	July 14	July 15	July 16	July 17	July 18
	Day 1 (Marc Liberatore)	Day 2 (Brian Levine)	Day 3 (Wayne Burleson)	Day 4 (Dan Holcomb)	Day 5 (Amir Houmansadr)
9:30 AM - 11:00 AM	Lecture: Introduction to Blockchain Scripted Lab: Hash function	Lab: Intro programming related to the scripted lab	Lab: Introduction to Cryptography Scripted Lab: Block Ciphers	Lecture/Lab: Introduction to computer hardware (boolean logic, integrated circuits, fabrication)	Lecture/Lab: Anonymous communications
11:00 AM - 12:00 PM		Lecture: Introduction to digital forensics (including breaks)		Lecture/Lab: Introduction to hardware fingerprinting for privacy and authentication	Lecture: Security and AI
12:00 PM - 1:30 PM					
1:30 PM - 2:30 PM	Lecture/Lab: Public Key Cryptography	Scripted Lab: Digital Forensics	Lecture: Embedded Security	Lecture: Introduction to reverse engineering	Program Tour: Server Room (Emmanuel / Lilly/Sri/Ayush)
2:30 PM - 3:30 PM			Program Tour: ECE Labs Lecture: Women in Cryptography	The Imitation Game (Lilly/Prathik/Bala)	Program Tour: Campus Walk (Tammy/Hetvi/Sri/Ayush)
3:30PM - 4:00 PM	Program Tour: Makerspace 3D and Laserprinting (Emmanuel/Hetvi/Mary/Sri)	Project Idea/Scope Discussion (Lilly/Walid/Prathik/Ayush)	Lecture: Future Topics in Cryptography		
	July 21	July 22	July 23	July 24	July 25
	Day 1 (Emmanuel)	Day 2 (Emmanuel)	Day 3 (Emmanuel)	Day 4 (Emmanuel)	Day 5 (Lilly)
9:30 AM - 11:00 AM	Lecture: Energy and Sustainability 1 David	Lecture: Energy and Sustainability 2 Mohammad	Lecture: Earable Systems for Healthcare VP Nguyen (Amir and Aziz)	Computers for Creativity: Student Team Project (Lilly/Adam/Tammy/Jorge/John/Mary/Ayush/Sri)	Computers for Creativity: Project Demo (Lilly/Adam/Tammy/Jorge/John/Prathik/Ayush)
11:00 AM - 12:00 PM	Lecture: The Cloud Next Door The impact of Datacenters on Local Communities Noman	Lecture: Where does energy come from, and how can we be more green? Adam	Lab: Health Care Sensing VP Nguyen (Amir and Aziz)		
12:00 PM - 1:30 PM					
1:30 PM - 2:30 PM	Show and Tell: Machine Learning (Adam/Bala/Ayush)	Lecture: Transportation Jimi Oke	Show and Tell: Mixed AR/VR Yasra/Bala/Prathik	Computers for Creativity: Student Team Project (Lilly/Adam/Tammy/Jorge/John/Mary/Ayush/Sri)	Student Hangout: Fun and Games (Prathik/Ayush)
2:30 PM - 3:30 PM	Project Idea Brainstorming (Emmanuel/Bala/Ayush)	Lecture: Energy and Sustainability 4 Nikko			
3:30PM - 4:00 PM		Game (Bala/Prathik)	Science Game (Bala/Prathik)	Panel Session: Life as a CS Undergraduate (Adam/Mary/Sri)	Program Debrief Prashant/All