

Courses Offered in AY2024-2025					(Cohort AY18/19 & before)	(Cohort AY19/20 onwards)		
Course Code	Course Title	Unit	Semester 1	Semester 2	Pre-requisites		Co-requisites	Preclusions
ME Major Courses								
ME1102	Engineering Principles & Practice I	4	Dr Danielle Tan A/Prof Zhou Guangya Asst Prof Subramaniam V A/Prof Christina Lim A/Prof Ernest Chua K J A/Prof Koh Yee Kan A/Prof Yang WenMing A/Prof Wang Hao					EG1111 & RB1101
ME2104	Engineering Principles & Practice II	4		A/Prof Gerard Leng S B Asst Prof Subramaniam V A/Prof Chew Chee Meng Dr Ong Eng Teo Dr Daniel Sng Dr Danielle Tan Asst Prof Sing Swee Leong A/Prof Teo Chee Leong				EG1112
ME2102	Engineering Innovation & Modelling	4	Dr Jason Ku	Dr Jason Ku				
ME2112	Strength of Materials	4	Dr Ong Eng Teo A/Prof Vincent Tan	Dr Ong Eng Teo A/Prof Vincent Tan	EG1111	ME1102		
ME2115	Mechanics of Machines	4	Dr Ong Eng Teo Dr Shen Lei	Dr Ong Eng Teo Dr Shen Lei	PC1431, PC1431FC, PC1431X, PC1433	ME1102		
ME2121	Engineering Thermodynamics and Heat Transfer	4	Dr Daniel Sng A/Prof Md Raisul Islam	Dr Daniel Sng A/Prof Md Raisul Islam	PC1431, PC1431FC, PC1431X, PC1433	ME1102		
ME2134	Fluid Mechanics I	4	A/Prof Teo Chiang Juay Prof Shu Chang	A/Prof Teo Chiang Juay Prof Shu Chang	PC1431, PC1431FC, PC1431X, PC1433	ME1102		
ME2142	Feedback Control Systems	4	Asst Prof Song Ziyong Asst Prof Subramaniam V	A/Prof Ong Chong Jin Asst Prof Subramaniam V	MA1512 & MA1513			ME2142E & TME2142
ME2162	Manufacturing Processes	4	Asst Prof Zhai Wei Asst Prof Sing Swee Leong	Asst Prof Zhai Wei Asst Prof Sing Swee Leong				
ME4101A	B.Eng. Dissertation	8	Dr Danielle Tan	Dr Danielle Tan	Stage 4 standing (112 Units)			ME4101/ EG4301/ ME4101B
ME4101B	Mechanical Systems Design	8	Prof Fuh Ying His, Jerry A/Prof Tay Eng Hock, Francis A/Prof Zhang Yunfeng	A/Prof Tay Eng Hock, Francis A/Prof Zhang Yunfeng		Stage 4 standing (112 Units)		ME4101/ EG4301/ ME4101B
ME Technical Electives Courses								
ME2135	Intermediate Fluid Mechanics	4		Prof Khoo Boo Cheong Asst Prof Zhang Mengqi	ME2134			TME2135
ME3122	Heat Transfer	4	A/Prof Lee Poh Seng A/Prof Md Raisul Islam		PC1431, PC1431FC, PC1431X, PC1433	ME3122		ME3122E/ TME3122
ME3163/ EE3306	Introduction to Cyber Physical Systems	4	A/Prof Prahlad Vadakkepat A/Prof Biplab Sikdar Prof Ho Chaw Sing A/Prof Senthil Kumar A					EE3306
ME3211	Mechanics of Solids	4	A/Prof Zhou Guangya Asst Prof Yan Wentao		ME2112			
ME3241	Microprocessor Applications	4		Asst Prof Sartoretti, G A A/Prof Chui Chee Kong				
ME3242	Automation	4	Dr Zhang Hongying					
ME3243/ EE3305	Robotic System Design	4	A/Prof Cecilia Laschi A/Prof Prahlad Vadakkepat Mr Lai Yan Kai					EE3305
ME3252	Materials Engineering Principles for Engineers	4	A/Prof Duong Hai Minh A/Prof Thian Eng San					ME2151 & ME3251
ME3261	Computer-Aided Design and Manufacturing	4	A/Prof Tay Eng Hock, Francis A/Prof Zhang Yunfeng				ME2162	
ME3263	Design for Manufacturing and Assembly	4	A/Prof Ong Soh Khim				ME2162/ ME3162	
ME3281	Microsystems Design and Applications	4		A/Prof Zhou Guangya				
ME3291	Numerical Methods in Engineering	4		Prof Khoo Boo Cheong Asst Prof Zhu Lailai	MA1505 & MA1512 & MA1513			
ME4105/ OT5102	Oil and Gas Technology (Specialisation Study Course-OOGT)	4	A/Prof Loh Wai Lam					
ME4212	Aircraft Structures	4		Prof Tay Tong Earn				
ME4223	Thermal Environmental Engineering	4	A/Prof Ernest Chua K J A/Prof Md Raisul Islam		ME2121			TME4223
ME4226	Energy and Thermal Systems	4	Dr Daniel Sng		ME2121			

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ME4227	Internal Combustion Engines	4		A/Prof Yang Wenming Asst Prof Zhang Huangwei				
ME4231	Aerodynamics	4		Asst Prof Zhu Lailai Asst Prof Chng Tat Loon	ME2134			
ME4233	Computational Methods in Fluid Mechanics	4	Dr Danielle Tan Asst Prof Zhang Mengqi		ME2134 or ESP2106			
ME4241	Aircraft Performance, Stability and Control	4	A/Prof Gerard Leng S B					
ME4242	Soft Robotics	4	Prof Cecilia Laschi Prof Yeow Chen Hua Raye					
ME4245	Robot Mechanics and Control	4	A/Prof Ang Jr. MH		ME2142		ME2142	
ME4248	Simulation and Control of Manufacturing Systems	4	A/Prof Peter Chen Dr Zhang Hongying					
ME4252	Nanomaterials for Energy Engineering	4	A/Prof Palani Balaya		Stage 3 (76 Units) or 4 standing (112 Units)			
ME4253	Biomaterials Engineering	4		A/Prof Thian Eng San				
ME4261	Tool Engineering	4		Prof Senthil Kumar A A/Prof Wang Hao			ME2162	
ME4262	Automation in Manufacturing	4		A/Prof Zhang Yunfeng			ME2162	
ME4291	Finite Element Analysis	4	A/Prof Lim Kian Meng Dr Ong Eng Teo		MA1505 -ME Students MA1511 & MA1512 -ESP Students			
Special Term 1 Course								
ME4263	Fundamentals of Product Development	4	A/Prof Lu Wen Feng A/Prof Tay Eng Hock, Francis					

ME Technical Electives (TEs) offered in the evening

You may find the email contact of the course lecturers from the ME website: <https://www.eng.nus.edu.sg/me/about-us/people/academic-staff/>

For non-ME courses, you may refer to NUSMods website : <https://nusmods.com/>