

Sample schedule - Mechanical Engineering

Updated 11/8/2023

MechE		MechE + BME	
First year	Units	First year	Units
Fall		Fall	
21-120 Differential & Integral Calculus	10	21-120 Differential & Integral Calculus	10
24-101 Fundamentals of Mechanical Eng.	12	24-101 Fundamentals of Mechanical Eng. or 42-101 Intro to BME	12
33-141 Physics I for Engineering Students	12	33-141 Physics I for Engineering Students	12
99-101 Computing@Carnegie Mellon	3	99-101 Computing@Carnegie Mellon	3
76-101 Interpretation and Argument	9	76-101 Interpretation and Argument	9
Total:	46	Total:	46
Spring		Spring	
21-122 Integration & Approximation	10	21-122 Integration & Approximation	10
xx-xxx Second Introductory Engineering Course	12	24-101 Fundamentals of Mechanical Eng. or 42-101 Intro to BME	12
xx-xxx Physics II/Computer Science/Chemistry	10-12	xx-xxx Physics II/Computer Science/Chemistry	10-12
xx-xxx General Education Course	9	03-121 Modern Biology	9
Total:	41-43	Total:	41-43
Second year		Second year	
Fall		Fall	
24-221 Thermodynamics I	9	24-221 Thermodynamics I	9
24-261 Mechanics I: 2D Design	10	24-261 Mechanics I: 2D Design	10
21-254 Linear Algebra and Vector Calculus for Engineers	11	21-254 Linear Algebra and Vector Calculus for Engineers	11
xx-xxx Physics II/Computer Science/Chemistry	10-12	xx-xxx Physics II/Computer Science/Chemistry	10-12
24-xxx 24-200 Machine Shop OR 24-251 Electronics for Sensing and Actuation	1-3	24-xxx 24-200 Machine Shop OR 24-251 Electronics for Sensing and Actuation	1-3
xx-xxx General Education Course	9	42-202 Physiology or 42-203 BME Laboratory	9
39-210 Experiential Learning I	0	42-201 Professional Issues in BME	3
		39-210 Experiential Learning I	0
Total:	50-54	Total:	53-57
Spring		Spring	
24-231 Fluid Mechanics	10	24-231 Fluid Mechanics	10
24-262 Mechanics 2: 3D Design	10	24-262 Mechanics 2: 3D Design	10
21-260 Differential Equations	9	21-260 Differential Equations	9
xx-xxx Physics II/Computer Science/Chemistry	10	xx-xxx Physics II/Computer Science/Chemistry	10
24-xxx 24-200 Machine Shop OR 24-251 Electronics for Sensing and Actuation	1-3	24-xxx 24-200 Machine Shop OR 24-251 Electronics for Sensing and Actuation	1-3
Lab Requirement	3-9	42-202 Physiology or 42-203 BME Laboratory	9
xx-xxx General Education Course	9	xx-xxx General Education Course	9
39-220 Experiential Learning II	0	39-220 Experiential Learning II	0
Total:	52-60	Total:	58-60
Third year		Third year	
Fall		Fall	
24-302 Professional Development for Mechanical Engineers (Fall or Spring)	2	24-302 Professional Development for Mechanical Engineers (Fall or Spring)	2
24-322 Heat Transfer	10	24-322 Heat Transfer	10
24-351 Dynamics (offered Fall or Spring)	10	24-351 Dynamics (offered Fall or Spring)	10
24-370 Mechanical Design: Methods and Applications	12	24-370 Mechanical Design: Methods and Applications	12
xx-xxx Engineering Statistics Requirement	9	xx-xxx Engineering Statistics Requirement	9
xx-xxx General Education Course	9	42-302 BME Systems Modeling and Analysis or 42-xxx BME Track Elective	9
39-310 Experiential Learning III	0	39-310 Experiential Learning III	0
Total:	52	Total:	52
Spring		Spring	
24-302 Professional Development for Mechanical Engineers (Fall or Spring)	2	24-302 Professional Development for Mechanical Engineers (Fall or Spring)	2
24-311 Numerical Methods	10	24-311 Numerical Methods	10
24-321 Thermal-Fluids Experimentation	12	24-321 Thermal-Fluids Experimentation	12
24-352 Dynamics Systems and Controls (Fall or Spring)	12	24-352 Dynamics Systems and Controls (Fall or Spring)	12
xx-xxx General Education Course	9	42-302 BME Systems Modeling and Analysis or 42-xxx BME Track Elective	9
	45	xx-xxx General Education Course	9
Total:	45	Total:	54
Forth year		Forth year	
Fall		Fall	
24-441 Product Design or 24-671 Electromechanical Systems Design	12	42-401 Foundations of BME Design	6
24-452 Mechanical Systems Experimentation (offered Fall or Spring)	9	24-452 Mechanical Systems Experimentation (offered Fall or Spring)	9
xx-xxx Elective	9	42-xxx BME Track Elective	9
xx-xxx Elective	9	xx-xxx Elective	9
xx-xxx General Education Course	9	xx-xxx General Education Course	9
	48	xx-xxx General Education Course	9
Total:	48	Total:	51

Spring		Spring	
24-441 Product Design or 24-671 Electromechanical Systems Design or 24-631 Thermal Design	12	42-402 BME Design	9
24-xxx Mechanical Engineering Technical Elective	9-12	24-xxx Mechanical Engineering Technical Elective	9-12
xx-xxx General Education Course	9	42-xxx BME Track Elective	9
xx-xxx Elective	9	xx-xxx General Education Course	9
xx-xxx Elective	9	xx-xxx General Education Course	9
		xx-xxx General Education Course	9
	Total: 48-51		Total: 54-57

Minimum no. of units to graduate: 382 (MechE), 400 (BME/MechE)

Note: This sample schedule serves as a starting point to help students plan their class schedules. Students are advised and strongly encouraged to discuss their plans with the academic advisors.