

## Automotive Engineering:Railway Specialization 2025-2026

Year	Course	Course	Course	Course	Course	Course
1-1	COMM 1050U Technical Communications	ENGR 1015U Introduction to Engineering	MATH 1010U Calculus I	MATH 1850U Linear Algebra for Engineers	PHY 1010U Physics I	
1-2	CHEM 1800U Chemistry for Engineers (Credit restrictions: CHEM 1010U/CHEM 1020U/CHEM 1110U)	ENGR 1025U Engineering Design (ENGR 1015U)	ENGR 1200U Introduction to Programming for Engineers (Credit Restriction: INFR 1100U)	MATH 1020U Calculus II (MATH 1010U)	PHY 1020U Physics II (PHY 1010U)	SSCI 1470U Impact of Science and Technology on Society
2-1	ELEE 2790U Electric Circuits (MATH 1020U, MATH 1850U, PHY 1020U)	MANE 2220U Structure and Properties of Materials (CHEM 1800U)	MATH 2860U Differential Equations for Engineers (MATH 1020U, Coreq: MATH 1850U)	MECE 2230U Statics (MATH 1020U, PHY 1010U)	MECE 2310U Concurrent Engineering and Design (ESNS 1200U or ENGR 1025U)	MECE 2640U Thermodynamics and Heat Transfer (MATH 1020U, PHY 1010U)
2-2	AUTE 2010U Fundamentals of Automotive Engineering (MECE 2230U)	ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U or ELEE 2530U)	MECE 2420U Solid Mechanics I (MECE 2230U)	MECE 2430U Dynamics (MATH 1850U, MECE 2230U)	MECE 2860U Fluid Mechanics (PHY 1010U, MATH 1020U)	STAT 2800U Statistics and Probability for Engineers (MATH 1020U)
3-1	AUTE 3170U Automotive Component Design (MECE 2420U, MECE 2430U, AUTE 2010U)	ENGR 3011U Introduction to Railway Systems	MANE 3190U Manufacturing and Production Processes (MANE 2220U, MECE 2420U)	MECE 3030U Computer-Aided Design (MECE 2310U, MECE 2420U)	MECE 3350U Control Systems (ELEE 2790U or ELEE 2210U or METE 2010U, MATH 2860U, MECE 2430U)	
3-2	AUTE 3210U Automotive Vibrations (AUTE 3170U)	AUTE 3450U Combustion and Engines (CHEM 1800U, MECE 2320U or MECE 2640U)	AUTE 3500U Automotive Instrumentation and Controls (AUTE 2010U, MECE 3350U)	ENGR 3360U Engineering Economics	Liberal Studies Elective	
4-1	AUTE 4010U Vehicle Dynamics and Control AUTE 2010U, (MECE 3210U or AUTE 3210U)	AUTE 4080U Electric and Hybrid Vehicles (AUTE 3500U or MECE 3390U)	ENGR 4022U Railway Safety and Signalling (ENGR 3011U)	ENGR 4950U Capstone Systems Design for Mechanical, Automotive, Mechatronics and Manufacturing Engineering I (Successful completion of all non-elective courses in year three)	Liberal Studies Elective	
4-2	AUTE 4600U Vehicle Systems Design (AUTE 4010U)	ENGR 4033U Railway Rolling Stock (ENGR 3011U)	ENGR 4044U Railway Systems Operation and Maintenance (ENGR 3011U)	ENGR 4760U Ethics, Law and Professionalism for Engineers	ENGR 4951U Capstone Systems Design for Mechanical, Automotive, Mechatronics and Manufacturing Engineering II (ENGR 4950U)	