

NC A&T Mechanical Engineering

(Unofficial Community Colleges to NC A&T Curriculum)

Degree Earned: NC A&T Bachelor of Science in Mechanical Engineering
Effective: 2016-2017

Transfer GPA = 2.5

Grey Highlighted Courses – Take at NC A&T

FRESHMAN YEAR					
	Fall Semester	Credit		Spring Semester	Credit
ENG 111	ENGL 100 Written Communication I	3	ENG 112	ENGL 101 Written Communication II	3
CHM 151	CHEM 106 General Chemistry IV	3	PHY 251	PHYS 241 General Physics I	3
CHM 151	CHEM 116 General Chemistry IV Lab	1	PHY 251	PHYS 251 General Physics I Lab	1
MAT 271	MATH 131 Calculus I	4	MAT 272	MATH 132 Calculus II	4
EGR 150	GEEN 100 Engineering Design and Ethics	2		Social Science Elective [6]	3
NC A&T	GEEN 111 College of Engineering Colloquium [1][2]	1	NC A&T	MEEN 121 Mechanical Engr. Colloquium II [2]	1
DFT 170	MEEN 104 Graphics in Mechanical Engineering	2			
16			15		

SOPHOMORE YEAR					
	Fall Semester	Credit		Spring Semester	Credit
MAT 273	MATH 231 Calculus III	4		Humanities Elective [6]	3
NC A&T	MEEN 202 MEEN Sophomore Project	1	PHY 252	PHYS 242 Physics II	3
NC A&T	MEEN 210 Numerical Methods using MATLAB	3	PHY 252	PHYS 252 Physics II Lab	1
EGR 220	MEEN 231 Mechanics I – Statics	3	NC A&T	MEEN 241 Fundamentals of Thermodynamics	3
NC A&T	MEEN 261 Fundamentals of Material Science	3	NC A&T	MEEN 267 Mechanics of Materials Lab	1
			NC A&T	MEEN 232 Strength of Materials	3
			EGR 225	MEEN 233 Mechanics II: Dynamics	3
14			17		

JUNIOR YEAR					
	Fall Semester	Credit		Spring Semester	Credit
NC A&T	INEN 260 Engineering Economy	2	NC A&T	ECEN 340 Electrical Circuit Analysis	3
NC A&T	INEN 370 Engineering Statistics	3	NC A&T	MEEN 317 Thermal-Fluid Systems Lab	1
MAT 285	MATH 431 Introduction to Differential Equations	3	NC A&T	MEEN 324 System Dynamics	3
NC A&T	MEEN 316 Fluid Mechanics	3	NC A&T	MEEN 341 Applied Thermodynamics	3
NC A&T	MEEN 363 Manufacturing Process	3	NC A&T	MEEN 343 Heat Transfer	3
NC A&T	MEEN 361 Modern Engr. Materials	3	NC A&T	MEEN 321 Mechanical Engineering Design	3
17			16		

SENIOR YEAR					
	Fall Semester	Credit		Spring Semester	Credit
	Social Science Elective [6]	3		Humanities Elective [6]	3
NC A&T	MEEN 424 Vibrations and Controls	3	NC A&T	MEEN 425 Mechanical Systems Lab	1
NC A&T	MEEN 421 Computer Aided Design of Machine Elements	3	NC A&T	MEEN 404/492 ME Topics Review/Sr Seminar [3,5]	1
NC A&T	MEEN 401 Gen Engr. Topics Review [4]	1	NC A&T	MEEN 481 Mechanical Engineering Senior Project II [5]	3
NC A&T	MEEN 480 Mechanical Engineering Senior Project [4]	3	NC A&T	MEEN 4XX Technical Elective	3
NC A&T	MEEN 4XX Technical Elective	3	CHM 152/BIO 111/MAT 280	Math/Science Elective – other options also available at NC A&T	3
13			14		

NC A&T - Minimum Credit Hours Required for Graduation in Mechanical Engineering

125

NC A&T Mechanical Engineering (continued)

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NOTES

[1] MEEN students should take Section 5 of the colloquium courses - GEEN 111.

[2] Transfer students with 16 hours of transfer credit will be exempted from GEEN 111 and for those with 32 credit hours of transfer credits will be exempted from both GEEN 111 and MEEN 121.

[3] Student preparing to take the FE exam will take MEEN 404 instead of MEEN 492.

[4] These courses are offered in the FALL SEMESTERS ONLY

[5] These course are offered in the SPRING SEMESTERS ONLY

[6] Of the 12 total hours in Social/behavioral Sciences and Humanities/Fine Arts, at least 3 hours in African-American Studies and 3 hours of Global Awareness courses required (HIS 111 or HIS 112 or REL 110 will fulfill Global Awareness Elective requirement).