NC A&T Mechanical Engineering Aerospace Option

(Unofficial Community Colleges to NC A&T Curriculum)

Degree Earned: NC A&T Bachelor of Science in Mechanical Engineering Aerospace Option Transfer GPA = 2.5

Effective: 2017 Grey Highlighted Courses – Take at NC A&T

FRESHMAN YEAR					
Com College	<u>Fall Semester</u>	<u>Credit</u>	Com College	Spring Semester	<u>Credit</u>
ENG 111	ENGL 100 Ideas & Their Expressions	3	ENG 112	ENGL 101 Ideas and Expressions 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	HIS, PSY, SOC, ECO	Social Science Elective	3
NC A&T	GEEN 111 College of Engineering Colloquium [1,2]	1	NC A&T	MEEN 121 ME Colloquium I [2]	1
DFT 170	MEEN 104 Engineering Graphics	2			
		16			15
SOPHOMORE YEAR					
Com College	<u>Fall Semester</u>	<u>Credit</u>	Com College	<u>Spring Semester</u>	<u>Credit</u>
MAT 273	MATH 231 Calculus III	4	EGR 225	MEEN 233 Mechanics II: Dynamics	3
NC A&T	MEEN 202 ME Sophomore Project	1	PHY 252	PHYS 242 General Physics II	3
NC A&T	MEEN 210 Numerical Methods in MATLAB	3	PHY 252	PHYS 252 General Physics II Lab	1
EGR 220	MEEN 231 Mechanics I: Statics**	3	NC A&T	African American Studies Elective	3
NC A&T	MEEN 261 Fundamentals of Materials Science	3	NC A&T	MEEN 267 Mechanics of Materials Lab	1
			NC A&T	MEEN 232 Strength of Materials	3
			NC A&T	MEEN 421 Thermodynamics	3
		14			17
JUNIOR YEAR					
Com College	Fall Semester	Credit	Com College	Spring Semester	<u>Credit</u>
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 319 Aerodynamics & Propulsion Lab	1
MAT 285	MATH 431 Introduction to Differential Equations	3	NC A&T	MEEN 324 System Dynamics	3
NC A&T	MEEN 315 Aerodynamics	3	NC A&T	MEEN 318 Propulsion	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					
Com College	<u>Fall Semester</u>	<u>Credit</u>	Com College	Spring Semester	<u>Credit</u>
	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 Machines	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 482 Aerospace Senior Project I [5]	3
NC A&T	MEEN 480 Mechanical Engineering Senior Project [4]	3	NC A&T	MEEN 5XX 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
16					

NC A&T - Minimum Credit Hours Required for Graduation in Mechanical Engineering (Aerospace option) 125

NC A&T Mechanical Engineering Aerospace option (continued)

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NOTES

- [1] MEEN students should take Section 5 of the colloquium courses GEEN 111.
- [2] Course substitutions will be made for GEEN 111 for students with 16 hours of transfer credit and for MEEN 121 for those with 32 credit hours of transfer credits.
- [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).