

**THE COLLEGE OF NEW JERSEY**  
**DEGREE REQUIREMENTS**  
**Bachelor of Science in Computer Engineering (ESCO)**

NAME \_\_\_\_\_ SS# \_\_\_\_\_

Admission Term \_\_\_\_\_ Date \_\_\_\_\_

Total Number of transfer credits from 2-year programs \_\_\_\_\_ (not to exceed 60 credits)

Retain this sheet to record progress toward your degree. Eligibility for graduation requires:

- 1) completion of or testing out of all courses printed on this sheet (and/or courses entered by faculty advisor with your approval)
- 2) minimum of 42 s.h. earned at TCNJ excluding credit by exam
- 3) minimum of 133 s.h. excluding Basic Skills and Seminar courses
- 4) a cumulative grade point average of 2.00
- 5) meeting all Engineering Department policy requirements

Gender	_____
Western	_____
Non-Western	_____

**I. General Education Requirements 28 S.H.**  
 (Consult College Catalog or Course Schedule for acceptable courses)

Plan Grade Sem	Cr	TCNJ Course Required	Cr
___ ENGR 095 Intro to Engr.	0	_____	___
___ WRI 102 Academic Writing	4	_____	___
___ IDSC 151 Athens to New York	3	_____	___
___ IDSC 252 Soc. Ethics & Tech.	3	_____	___
___ Social Sciences (process)	3	BCON 200 Microeconomics	___
___ Social Sciences (content)	3	_____	___
___ Fine or Performing Arts	3	STEC 161 Creative Design	___
___ History	3	_____	___
___ Literature	3	_____	___
___ Philosophy/Religion	3	_____	___

**II. Math and Physical Science 35 S.H**

Plan Grade Sem	Cr	TCNJ Course Required	Cr
___ MAT 127 Calculus A	4	_____	___
___ MAT 128 Calculus B	4	_____	___
___ MATH 229 Calculus III	3	_____	___
___ MATH 386 Differential Eqns.	3	_____	___
___ ENGR 272 Adv. Engr. Math I	3	_____	___
___ ENGR 342 Adv. Engr. Math II	3	_____	___
___ CMSC 210 Discrete Structures	3	_____	___
___ PHY 201 General Physics I	4	_____	___
___ PHY 202 General Physics II	4	_____	___
___ CHE 201 General Chemistry I	4	_____	___

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**III. General Engineering Requirements 26 S.H.**

Plan Grade Sem		Cr	Authorized Substitution	Cr
___ ___	ENGR 091/92 Engr. Seminar Fr. #1/#2	0	_____	___
___ ___	ENGR 093/94 Engr. Seminar Jr. #1/#2	0	_____	___
___ ___	ENGR 098 Fundamentals of Engineering Review	0	_____	___
___ ___	ENGR 099 Sr. Professional Seminar	0	_____	___
___ ___	ENGR 142 Fund. of Engr. Design	3	_____	___
___ ___	ENGR 212 Circuit Analysis	3	_____	___
___ ___	ENGR 214 Circuit Analysis Laboratory	1	_____	___
___ ___	ENGR 222 Statics	3	_____	___
___ ___	ENGR 262 Dynamics	3	_____	___
___ ___	ENGR 312 Digital Cks. & Microprocessors	3	_____	___
___ ___	ENGR 322 Thermodynamics	3	_____	___
___ ___	ENGR 352 Control Systems I	3	_____	___
___ ___	ENGR 354 Control Systems Laboratory	1	_____	___
___ ___	ENGR 372 Engineering Economy	3	_____	___

**IV. Computer Engineering Requirements 44 S.H.**

Plan Grade Sem		Cr	Authorized Substitution	Cr
___ ___	CSC 220 Comp. Sci. I: Computational Prob.Solving	4	_____	___
___ ___	CSC 230 Comp. Sci.II: Data Structures	4	_____	___
___ ___	CMSC 330 Operating Systems	3	_____	___
___ ___	CMSC 340 Comp. Sci. III: Program. In the Large	4	_____	___
___ ___	ELEC 251 Electronics	3	_____	___
___ ___	ELEC 321 Systems & Signals	3	_____	___
___ ___	ELEC 333 Electrical Engr. Lab. I	1	_____	___
___ ___	ELEC 361 Digital Signal Processing	3	_____	___
___ ___	ELEC 363 Electrical Engr. Lab. II	1	_____	___
___ ___	ELEC 411 Embedded Systems	3	_____	___
___ ___	ELEC 443 Microcomputer Systems	2	_____	___
___ ___	ELEC 451 Computer Architecture & Organization	3	_____	___
___ ___	ELEC 495 Senior Project I	1	_____	___
___ ___	ELEC 496 Senior Project II	3	_____	___
___ ___	Area Elective *see approved list	3	_____	___
___ ___	Area Elective *see approved list	3	_____	___

DATE: \_\_\_\_\_

EVALUATOR: \_\_\_\_\_

\_\_\_\_\_ Degree Completion

**Any deviation from the above course listing must be authorized by your advisor and the department chair (see Course Substitution Approval Form).**

\*Area electives must be chosen from the following approved list. At least one Area Elective must be an ELEC or the engineering Special Topics course.

- |                                      |                                        |
|--------------------------------------|----------------------------------------|
| CMSC 350 Digital Computer Graphics   | ELEC 341 Communication Systems         |
| CMSC 360 Networks                    | ELEC 421 Control Systems II            |
| CMSC 370 Stack Machines              | ELEC 441 Advanced Digital Design       |
| CMSC 380 Artificial Intelligence     | ELEC 471 VLSI Design                   |
| CMSC 390 Programming Languages       | ELEC 481 Robotics                      |
| CMSC 434 Compilers & Interpreters    | ELEC 492 Independent Study             |
| CMSC 446 Database Management Systems | ENGR 472 Special Topics in Engineering |
| CMSC 485 Topics in Computer Science  |                                        |

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