

# BS in Physics/Engineering Suggested Schedule

19 Cr.		17-21 Cr.		16-20 Cr.		12+ Cr.	
Fall	Spring	Fall	Spring	Fall	Spring	Fall (x2)	Spring (x2)
<b>Physics I</b> PHYS 2220/5 (6 cr.)	<b>Physics II</b> PHYS 2230/5 (6 cr.)	<b>Physics III</b> PHYS 3010 (4 cr.)	<b>Chemistry I</b> CHEM 1110/05 (5 cr.)	<b>Classical Mech.</b> PHYS 3220 (4 cr.)	<b>PHYS Elective</b> PHYS 3### (4 cr.) See list on back.	Engineering Courses at NJIT, Rowan University, or Rutgers University	
<b>Calculus I</b> MATH 2215 (5 cr.)	<b>Calculus II</b> MATH 2216 (5 cr.)	<b>Calculus III</b> MATH 2217 (5 cr.)	<b>Rowan/Rutgers</b> PHYS 3345 (4 cr.)	<b>GAH or GSS</b> H, I, or R1/R2 (4 cr.)	<b>GIS</b> H, I, or R1/R2 (4 cr.)		
<b>Rhetoric and Composition</b> FRST 2120 (4 cr.)	<b>Programing &amp; Problem Solving</b> CSCI 2101 (4 cr.)	<b>All but ECE at Rowan</b> PHYS 2300 (4 cr.)	<b>NJIT</b> MATH 3328 (4 cr.)	<b>GAH or GSS</b> H, I, or R1/R2 (4 cr.)	<b>ASD</b> H, I, or R1/R2 (4 cr.)	Engineering Courses at NJIT, Rowan University, or Rutgers University	
<b>GAH or GSS</b> 1st Yr. Seminar (4 cr.)	<b>GAH or GSS</b> H, I, or R1/R2 (4 cr.)	<b>ECE</b> (Odd) PHYS 3120 (4cr.)	<b>**See Notes</b> (Even) PHYS 2410 (2 cr.) or (Odd) PHYS 3240 (4 cr.)	<b>Rowan</b> ECON 1400 (4 cr.)	<b>**See Notes</b> (Even) PHYS 2410 (2 cr.) or (Odd) PHYS 3240 (4 cr.)		
<b>Notes:</b> ECE = Electrical or Computer Engineering  *Completed in Fall of 2nd or 3rd Year  **Need <u>either</u> PHYS 2410 <u>or</u> 3240.  ***Completed in Spring of 2nd <u>or</u> 3rd Year  ***Physics Choice: ECE must take PHYS 3110. Others can take PHYS 3110 or 3340 <b>General Comment:</b> Summer courses may need to be taken to get all coursework in.		<b>*Engineering Graphics</b> GEN 2180 (4 cr.)	<b>***ECE</b> (Odd) MATH 2225 (4cr.)	<b>Rutgers/NJIT</b> Notes on back (ECON at other Univ.)	<b>***ECE</b> (Odd) MATH 2225 (4cr.)	Engineering Courses at NJIT, Rowan University, or Rutgers University	
		<b>Physics Choice***</b> See Back	<b>***Else</b> (Even) PHYS 3200 (4cr.)	<b>ECE</b> (Odd) PHYS 3120 (4cr.)	<b>***Else</b> (Even) PHYS 3200 (4cr.)		
		<b>Colloquium - (PHYS 2600)</b>	<b>Physics Choice***</b> See Back	<b>*Engineering Graphics</b> GEN 2180 (4 cr.)	<b>***Else</b> (Even) PHYS 3200 (4cr.)		
				<b>Engineering Seminar - (ENGN 4600)</b>			

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## Notes on Additional Requirements:

- All programs, *except* ECE at Rowan, require Statics.
- Rowan requires ECON 1400. Generally taken in 3rd. Yr. Fall/Spring.
- Rutgers and Rowan BME require BIO 1200/5 and 1400/5,
  - Can be completed at other Univ. or Summer course at Stockton
- Rutgers EnvE requires Chemistry II
- Rutgers ME/AE/CE/BME and Rowan BME require Chemistry IV

## Course Lists

Electives for ECE: PHYS 3030, 3200, 3240, 3340, 3350, 3370, 3380, 3390

Electives for Non-ECE: PHYS 3030, 3110 (If not used for Physics Choice), 3120, 3240, 3340 (If not used for Physics Choice), 3350, 3370, 3380, 3390

PHYS 3030 Biomedical Physics - Spring Even	PHYS 3340 Optics - Spring Odd
PHYS 3110 Electronics - Spring Even	PHYS 3350 Mathematical Physics - Fall Even
PHYS 3120 Electrical Circuits - Fall Odd	PHYS 3370 Electricity and Mag.- Spring Even
PHYS 3200 Mech. Of Mats. - Spring Even	PHYS 3380 Thermal Physics - Fall Even
PHYS 3240 Mod. And Sims. - Spring Odd	PHYS 3390 Intro. Quantum Mech. - Spring Odd

## Comments depending on where you plan on going:

- **Physics Choice:** ECE must take PHYS 3110. Others can take PHYS 3110 or 3340

## Writing Requirements Notes:

### Rutgers University and NJIT:

- three W1/W2 courses at Stockton (including FRST 2120).
- mandatory senior project counted as 3000+level W2 and "V" attribute.

### Rowan University:

- two W1/W2 courses at Stockton (including FRST 2120).
- junior/senior clinics counted as 3000+level W2s and "V" attribute.

## ASD Requirements (15-16 credits):

Rutgers University	Rowan University	NJIT (BS in Mech. E)
GEN 2180 Engineering Graphics (A)	GEN 2180 Engineering Graphics (A)	GEN 2180 Engineering Graphics (A)
CSCI 2101 Prog and Prob Solving	CSCI 2101 Prog and Prob Solving	CSCI 2101 Prog and Prob Solving
ASD Elective (H, I, V, R1/R2)	ASD Elective (H, I, V, R1/R2)	ASD Elective (H, I, V, R1/R2)
Engineering Economics will be transferred back to Stockton as ASD.	ECON 1400 Intro Microeconomics - requires a POI. (ECON program agreed to offer POI to dual-degree engineering program students who wish to take ECON 1400 but did not take ECON 1200)	Take a broad course on Economics and it will be transferred back to Stockton as ASD.

G-course	Complete?	Course
GAH		
GAH		
FRST 2120		
GIS		
GSS		
GSS		

Attributes	Complete?	Course
A		GEN 2180
H		
I		
R1		
R2		
V		At/After Stockton

At-some-distance*	Complete?	Course
ASD		GEN 2180
ASD		CSCI 2101
ASD		Econ Course
ASD		

Writing	Complete?	Course
W1 (1st Yr)		FRST 2120
W1/W2		PHYS 3110/40
W1/W2		
W1/W2 (3000+)		At/After Stockton

\*Must be 16 credits total.

Quant.	Complete?	Course
Q1 (1st Yr)		Calc I
Q1/Q2		Calc II
Q2		Physics I