



DEPARTMENT OF  
ELECTRICAL ENGINEERING  
AND COMPUTER SCIENCE  
College of Engineering & Computer Science  
Florida Atlantic University

**BIOMEDICAL ENGINEERING GRADUATE CERTIFICATE PROGRAM  
ADVISING SHEET (MINIMUM 15 CREDITS)**

Name: \_\_\_\_\_ Z Number: \_\_\_\_\_

FAU Start Date: \_\_\_\_\_ E-mail: \_\_\_\_\_ Phone: \_\_\_\_\_

**Note: PCB 3063 Genetics DOES NOT COUNT.** However, it is required to take as a deficiency if no course has been taken equivalent to it. If courses have been taken toward the Science Biotechnology Certificate Program in the College of Science at FAU, they **will not be double counted**.

Course	Title	Credits	Semester	Grade
PCB 3063	Genetics			

**Science Courses- Choose 2 courses (min 6 credits)**

Course	Title	Credits	Semester	Grade
BCH 5415	Biochemistry of the Gene	3		
BCH 6740	Advanced Biochemistry	3		
BSC 6458C	Bioinformatics	4		
BSC 6935	Biotechnology Lab (Contact Dr. Binninger/binninng@fau.edu)	3		
BSC 6936	Practical Cell Neuroscience	3		
CHM 6157	Instrumentation	3		
CHEM 6720	Kinetics and Energetics of Reaction	3		
ENT 6196	Biotechnology Business Development	3		
ISC 5465	Cognitive Neuroscience	3		
ISC 6447	Noninvasive Brain Recording	3		
ISC 6452	Cognition and Complex Systems	3		
ISC 6460	Computational Neuroscience I	3		
ISC 6464	Computational Neuroscience 2	3		
MCB 6930	Advanced Topics in Microbiology	1-4		
PCB 6236	Advanced Immunology	3		
PCB 6349	Cell Neuroscience and Disease	3		
PSB 6345	Cellular and Molecular Neuroscience	3		
PSB 6346	Systems and Integrative Neuroscience	3		
RAT 6616	Medical Imaging Physics	3		
RAT 6628	Radiation Therapy Physics	3		
RAT 6629	Advanced Photon Beam Therapy	3		
STA 5195	Biostatistics	3		

**Computer Science Courses - Choose at most one**

Course	Title	Credits	Semester	Grade
CAP 5615	Introduction to Neural Networks	3		
CAP 6411	Foundations of Vision	3		
CAP 6512	Evolutionary Computing	3		
CAP 6673	Data Mining & Machine Learning	3		
COT 5930	Medical Information Systems	3		
COT 6930	Data Mining for Bioinformatics	3		

**Engineering Courses – Choose two if a Computer Science course has been taken, if not, choose three**

Course	Title	Credits	Semester	Grade
BME 5000	Introduction to Biomedical Engineering	3		
BME 5742	Biosystems Modeling and Control	3		
BME 6105	Biomaterials	3		
BME 6324	Stem Cell Engineering	3		
BME 6334	Tissue Engineering	3		
BME 6390	Neural Engineering	3		
BME 6585	Advanced Topics in Microfluidics and BioMEMS	3		
BME 6718	Computational Modeling of Biological Neural Networks	3		
BME 6762	Bioinformatics: Biomedical Perspectives	3		
EEE 5425	Nano Biotechnology	3		
EEL 5661	Robotic Application	3		
EEL 5934	Bio-Signal Processing	3		
EEL 6819	Neural Complex and Artificial Neural Networks	3		
EEL 6935	Automatic Biometrics	3		
EEL 6935	Medical Imaging	3		
EIN 5603C	Industrial Automation	3		
EML 6930	Introduction to Robotics	3		
EML 6930	Biomechanics	3		

**Advisor Comments:**

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Advisor Name: \_\_\_\_\_ Date: \_\_\_\_\_