

Suggested Course Sequence

FRESHMAN YEAR	
Fall	
Physics 2130/2131 or 2170/2171	
Mathematics 1800	
Winter	
Physics 2140/2141 or 2180/2181	
Chemistry 1220/1230	
Mathematics 2010	
SOPHOMORE YEAR	
Fall	
Physics 3700:	
Mathematics for Biomedical Physics	
Chemistry 1240/50	
Mathematics 2020	
Winter	
Physics 4700:	
Introduction to Biomedical Physics	
Biology 1510	
Chemistry 2220/2230 or 2280/2290	

For more information, please contact

Professor Peter Hoffmann,
BMP Undergraduate Student Advisor
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Detroit, MI 48201

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JUNIOR YEAR

Fall	
Physics 5620: Electronics (Lect/Lab)	
PHY 5700: Computational and Mathematical Methods	
Biology Elective	
Winter	
Physics 5340/41: Optics (Lect/Lab)	
Biology Elective	
Science Elective	
SENIOR YEAR	
Fall	
Physics 6700: Biological Physics	
Science Elective	
Science Elective	
Winter	
Physics/Radiology 6710:	
Physics in Medicine	
Physics 6780: Biomedical Physics Research (Writing Intensive)	

NOTE: *Required General Education Courses* are *not* included in this suggested course sequence. Please see Student Advisor for more information.



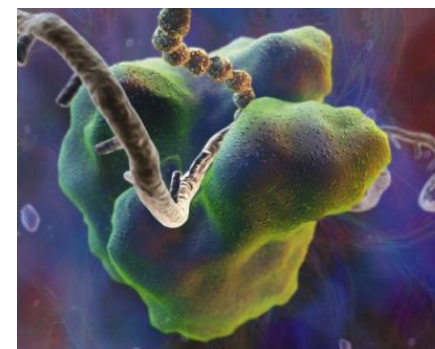
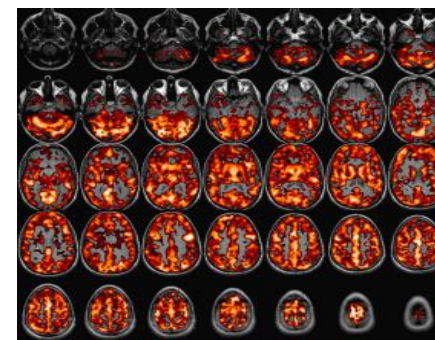
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WAYNE STATE UNIVERSITY

New Degree Program in BIOMEDICAL PHYSICS



www.physics.wayne.edu

BIOMEDICAL PHYSICS

Biomedical Physics deals with the applications of physics to biology and medicine.

This includes:

- Medical Imaging
- Radiation Therapy
- Biotechnology
- Molecular Biophysics

The new Program

The new interdisciplinary Biomedical Physics program combines classes in Physics, Biology, Chemistry and Medical Applications to prepare students for the job market of tomorrow.

This new major is unique and is not offered at any other university in Michigan.

The Biomedical Physics program is designed to provide a degree that can lead to several exciting careers:

- Medical School
- Pharmacy School
- Industry - R & D in medical instrumentation, pharmaceuticals
- Graduate school in
 - Medical Physics
 - Biophysics
 - Physics
 - Biomedical Engineering

New application-based courses

Specially designed courses teach the applications of physics to biology and medicine:

PHY 3700 Mathematics for Biomedical Physics (4 cr.)

Special mathematics course for biomedical physics majors - calculus, statistics.

PHY 4700 Introduction to Biomedical Physics (4cr.)

Modern physics topics for biomedical physics: quantum mechanics, nuclear physics, magnetic resonance etc.

PHY 5700 Computational and Mathematical Methods (3 cr.)

Students learn to use computer modeling to solve problems in physics with emphasis on biomedical applications.

PHY 6700 Biological Physics (4 cr.)

Applications of physics to molecular scale biology using many examples from current research.

RAD/PHY 6710 Physics in Medicine (3 cr.)

Applications of physics to modern medicine: medical imaging, radiation therapy etc. Will be taught by faculty from Medical Physics.

PHY 6780 Biomedical Physics Research (3 cr.)

Students will participate in research projects in bio- or medical physics.

Career Choices: Medical School and beyond

The new Biomedical Physics program is an ideal program to prepare you for Medical School or many other alternative careers.

If you are a student that likes to combine Physics, Mathematics, Biology, Chemistry & Engineering in a highly interdisciplinary program, Biomedical Physics is for you!

You may know that only about 5% of all premedical students make it into Medical School. So you need any edge you can get. If you love to learn about the physics and technology of biological systems and medicine, and want to be different from most premedical students, you may want to consider the new Biomedical Physics program. So far almost 50% of our graduates have been admitted to Medical School!!

In addition to Medical School, the Biomedical Physics program can also lead to other excellent careers:

- M.S./Ph.D. in Biomedical Engineering through the university AGRADE program (ask us for details).
- M.S. or Ph.D. in Medical Physics
- Graduate School in Physics, Biophysics or related fields
- Pharmacy or Dentistry School
- Career in Biomedical Devices (Industry)



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