

# Physics (PhD)

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## Degree Requirements

Code	Title	Hours
<b>Core Courses</b>		<b>16</b>
PY 785	Advanced Electricity and Magnetism I	
PY 721	Statistical Physics I	
PY 782	Quantum Mechanics II	
PY 783	Advanced Classical Mechanics I	
Additional 700-level course <sup>1</sup>		
PY 801	Seminar	
<b>Research Ethics Courses</b> <sup>12</sup>		<b>3</b>
Select four of the following elective courses: <sup>2</sup>		
PY 711	Advanced Quantum Mechanics I	
PY 712	Advanced Quantum Mechanics II	
PY 753	Condensed Matter Physics II	
PY 506	Nuclear and Subatomic Physics	
PY 507	Elementary Particle Physics	
PY 509	General Relativity	
PY 516	Physical Optics	
PY 517	Atomic and Molecular Physics	
PY 519	Biological Physics	
PY 525	Computational Physics	
PY 528	Introduction to Plasma Physics and Fusion Energy	
PY 543	Astrophysics	
PY 552	Condensed Matter Physics I	
PY 590	Special Topics In Physics (CM/Bio Seminar)	
PY 590	Special Topics In Physics (Quantum Optics )	
PY 599	Special Topics in Physics (PhysTec)	
<b>Half-Semester Specialized Courses</b>		
"Half-Semester Specialized Courses" are approved in conjunction with the academic committee to meet 72 total hours		
<b>Additional Courses in Related Fields</b>		
"Additional Courses" are approved in conjunction with the academic committee to meet 72 total hours		
Total Hours		72

<sup>1</sup> Cannot be PY 781 Quantum Mechanics I

<sup>2</sup> Not an exhaustive list

## Faculty

### Full Professors

Harald Ade

David E. Aspnes

Robert J. Beichner

Jerzy Bernholc

John Michael Blondin

John D. Brown

Laura I. Clarke

Karen E. Daniels

William L. Ditto

Daniel B. Dougherty

Robert Golub

Kenan Gundogdu

Hans D. Hallen

Paul R. Huffman

Chueng Ryong Ji

Jacqueline Krim

Gail C. McLaughlin

Lubos Mitas

Robert Riehn

Christopher M. Roland

Maria C. Sagui

Thomas M. Schaefer

John E. Thomas

Mithat Unsal

Keith R. Weninger

Albert R. Young

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## Associate Professors

Carla Frohlich

Alexander Kemper

James P. Kneller

Shuang Fang Lim

Richard Leigh Longland

Hong Wang

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## Assistant Professors

Julio Monti Belmonte

Rongmon Bordoloi

Mary Williard Elting

Matthew Piron Green

Sebastian Konig

Divine Philip Kumah

Sharonda Leblanc

Katherine Jean Mack

Vladimir Skokov

Dali Sun

Stephen Reynolds

Phillip J. Stiles

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## **Practice/Research/Teaching Professors**

Jason Russell Bochinski

Kazimierz Borkowski

Abay Dinku

Brand Irving Fortner

Keith Heyward

Parminder Kaur

John H. Kelley

Hayen Leendert

Kent Leung

Wenchang Lu

Vijaya Mehta

Zodiac T. Webster

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## **Emeritus Faculty**

Ruth W. Chabay

Kwong T. Chung

Raymond E. Fornes

David G. Haase

James W. Cook Jr.

Stephen R. Cotanch

William Robert Davis

Donald C. Ellison

Raymond Earl Fornes

Christopher Robert Gould

Karen L. Johnston

Gerald H. Katzin

Fred Lado Jr.

Gary E. Mitchell

George W. Parker III

Richard R. Patty