

# 香港浸会大学物理系

## 3+2 本硕连读课程

### 学生选修课程要求

每所合作院校都会要求其参与3+2 本硕连读课程的学生於香港浸会大学第一年学习期间修读指定的课程, 以用作学分转移。一般而言, 修读组合可分为以下四大类:

1. **专业必修课 (Major Core):** 物理科主修课程。
2. **毕业论文 (Graduation Project):** 学生需在香港浸会大学物理系导师指导下完成项目研究, 用英文写作论文并用英文进行口头答辩。
3. **专业选修课 (Major Elective):** 物理科选修课程。
4. **一般选修课 (Elective):** 香港浸会大学其他学系提供的课程, 如语言、资讯科技、文化研究等 (部份课程需先得到课程导师批准方可修读)。

一般而言, 学生需从上述课程中合共修读一定的学分, 方可达到所属院校的要求。学生请点选所属院校之连结, 以查询需选修香港浸会大学的课程组合及学分要求<sup>#</sup>:

- [南京师范大学物理科学与技术学院](#)
- [华南师范大学物理与电信工程学院](#)
- [山东大学物理学院](#)
- [南通大学理学院](#)
- [太原理工大学材料科學與工程學院 / 物理與光電工程學院 / 新材料科  
工程技术研究中心](#)
- [宁波大学理学院](#)

註:

#香港浸会大学对学生选修之课程并无特别限制 (部份需导师批准之课程除外), 但一般要求学生每学期需选修 12-18 学分。

## 南京师范大学物理科学与技术学院

1. 要求学生至少从下表第一及第二类课程中合共修读 10 学分。
2. 课程组合及学分分佈：

Type	Course Code	Credit	Semester
<b>1</b>	<b>Major Cores (6 credits)</b>		
	PHYS4025 Solid State Physics I	3	1st/2nd
	PHYS3016 Energy Management <i>Or</i>	3	2nd
	PHYS3017 Green Energy Lab with LabVIEW <i>Or</i>	3	1st
	PHYS3025 Physics and Technology of Energy Conservation <i>Or</i>	3	1st/2nd
	PHYS4006 Advanced Green Energy Lab (Metrology) <i>Or</i>	3	1st/2nd
	PHYS4007 Advances in Displays and Lighting <i>Or</i>	3	1st/2nd
	PHYS4016 Renewable Energy Materials and Devices <i>Or</i>	3	1st/2nd
	PHYS4017 Semiconductor Physics and Devices	3	1st/2nd
<b>2</b>	<b>Graduation Project (4 credits)*</b>		
	PHYS4898 Physics Project I	3	1st
	PHYS4899 Physics Project II	3	2nd
<b>3</b>	<b>Major Electives (at least 1-2 courses recommended)</b>		
	BIOL2035 Introduction to Environmental Sciences	3	2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st
	PHYS2007 Mathematical Methods for Physical Sciences	4	2nd

	PHYS2115 Electronics	3	1st
	PHYS3027 Intermediate Electromagnetism	3	2nd
	PHYS3035 Energy and Thermodynamics	3	1st
	PHYS3036 Mechanics	3	1st/2nd
	PHYS4015 Introduction to Intellectual Properties	2	1st/2nd
	PHYS4027 Computational Physics	3	1st/2nd
	PHYS4035-7 Topics in Energy Science I, II and III	3	1st/2nd
	PHYS4045 Electromagnetic Waves and Optics	3	1st/2nd
	PHYS4046 Quantum Mechanics	3	1st/2nd
	GEOG4016 Energy Development in China	3	2nd
<b>4</b>	<b>Electives</b>		
	<a href="#">Course List</a>	--	1st/2nd

\*南京师范大学計香港浸會大學 PHYS4898-9 課程為 4 學分。

## 华南师范大学物理与电信工程学院

1. 要求学生至少从下表第一及第二类课程中合共修读 12 学分。
2. 课程组合及学分分佈：

Type	Course Code	Credit	Semester
<b>1</b>	<b>Major Cores (6 credits)</b>		
	PHYS4025 Solid State Physics I	3	1st/2nd
	PHYS4006 Advanced Green Energy Lab (Metrology)	3	1st/2nd
	<i>Or</i>		
	PHYS4017 Semiconductor Physics and Devices	3	1st/2nd
<b>2</b>	<b>Graduation Project (6 credits)*</b>		
	PHYS4898 Physics Project I	3	1st
	PHYS4899 Physics Project II	3	2nd
<b>3</b>	<b>Major Electives (at least 1-2 courses recommended)</b>		
	BIOL2035 Introduction to Environmental Sciences	3	2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st
	PHYS2007 Mathematical Methods for Physical Sciences	4	2nd
	PHYS2115 Electronics	3	1st
	PHYS3027 Intermediate Electromagnetism	3	2nd
	PHYS3035 Energy and Thermodynamics	3	1st
	PHYS3036 Mechanics	3	1st/2nd
	PHYS4015 Introduction to Intellectual Properties	2	1st/2nd
	PHYS4027 Computational Physics	3	1st/2nd
	PHYS4035-7 Topics in Energy Science I, II and III	3	1st/2nd
	PHYS4045 Electromagnetic Waves and Optics	3	1st/2nd
	PHYS4046 Quantum Mechanics	3	1st/2nd
	GEOG4016 Energy Development in China	3	2nd
<b>4</b>	<b>Electives</b>		
	<a href="#">Course List</a>	--	1st/2nd

## 山东大学物理学院

1. 要求学生至少从下表第一及第二类课程中合共修读 15 学分。
2. 课程组合及学分分佈：

Type	Course Code	Credit	Semester
<b>1</b>	<b>Physics Courses (9-12 credits)</b>		
	BIOL2035 Introduction to Environmental Sciences	3	2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st
	PHYS2007 Mathematical Methods for Physical Sciences	4	2nd
	PHYS2115 Electronics	3	1st
	PHYS3027 Intermediate Electromagnetism	3	2nd
	PHYS3035 Energy and Thermodynamics	3	1st
	PHYS3036 Mechanics	3	1st/2nd
	PHYS4015 Introduction to Intellectual Properties	2	1st/2nd
	PHYS4025 Solid State Physics I	3	1st/2nd
	PHYS4027 Computational Physics	3	1st/2nd
	PHYS4035-7 Topics in Energy Science I, II and III	3	1st/2nd
	PHYS4045 Electromagnetic Waves and Optics	3	1st/2nd
	PHYS4046 Quantum Mechanics	3	1st/2nd
	GEOG4016 Energy Development in China	3	2nd
<b>2</b>	<b>Graduation Project (3/6 credits)</b>		
	PHYS4898 Physics Project I	3	1st
	PHYS4899 Physics Project II	3	2nd
<b>3</b>	<b>Electives</b>		
	<a href="#">Course List</a>	--	1st/2nd

## 南通大学理学院

1. 要求学生至少从下表第一及第二类课程中合共修读 12 学分。
2. 课程组合及学分分佈：

Type	Course Code	Credit	Semester
1	<b>Major Cores/Major Electives (6 credits)</b>		
	GEST3005 Smart Sensors and IoT	4	1st/2nd
	GEST3006 Digital Technology for Network Communication	3	1st/2nd
	GEST3007 Sustainable Transportation Technology	3	1st/2nd
	GEST3015 Smart Materials: Structures and Properties	3	1st/2nd
	GEST4026 Carbon Audit and Energy Audit	3	1st/2nd
	GEST4006 Energy Management of Green Building	3	1st/2nd
	GEST3025 Guided Study in Energy Science II	3	1st/2nd
	GEST3026 Networks, Complexity and their Applications	3	1st/2nd
	GEST3016 Machine Learning: from Data to Model	3	1st/2nd
	GEST3017 Green Energy Lab with Smart Devices	3	1st/2nd
	GEST4007 Advanced Green Energy Laboratory	3	1st/2nd
	GEST4015 Advances in Displays and Lighting	3	1st/2nd
	GEST4016 Topics in Energy Science I	3	1st/2nd
	GEST4017 Topics in Energy Science II	3	1st/2nd
	GEST4025 Topics in Energy Science III	3	1st/2nd
	GEST4027 Introduction to Robotics	3	1st/2nd
	SCIP4005 Interdisciplinary Topics in Sci.: Flexible Electronics	3	1st/2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st/2nd
	GEOG3007 Energy Problems and the Environment	3	1st/2nd
	GEOG4016 Sustainable Energy and Technological Innovation in China	3	1st/2nd
	GEOG4065 Energy Policy and Analysis	3	1st/2nd

	CAP3035 GE Capstone Interdisciplinary Independent Study (PHYS)	3	1st/2nd
	GCAP3036 Innovate for World Solutions	3	1st/2nd
<b>2</b>	<b>Graduation Project (6 credits)*</b>		
	GEST4898 Final Year Project I	3	1st
	GEST4898 Final Year Project I	3	2nd
<b>3</b>	<b>Electives</b>		
	<a href="#">Course List</a>	--	1st/2nd

太原理工大学材料科學與工程學院/ 物理與光電工程學院/ 新材料科  
 工程技术研究中心

1. 要求学生至少从下表第一及第二类课程中合共修读 12 学分。
2. 课程组合及学分分佈：

Type	Course Code	Credit	Semester
<b>1</b>	<b>Physics Courses (6-9 credits)</b>		
	BIOL2035 Introduction to Environmental Sciences	3	2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st
	PHYS2007 Mathematical Methods for Physical Sciences	4	2nd
	PHYS2115 Electronics	3	1st
	PHYS3027 Intermediate Electromagnetism	3	2nd
	PHYS3035 Energy and Thermodynamics	3	1st
	PHYS3036 Mechanics	3	1st/2nd
	PHYS4015 Introduction to Intellectual Properties	2	1st/2nd
	PHYS4025 Solid State Physics I	3	1st/2nd
	PHYS4027 Computational Physics	3	1st/2nd
	PHYS4035-7 Topics in Energy Science I, II and III	3	1st/2nd
	PHYS4045 Electromagnetic Waves and Optics	3	1st/2nd
	PHYS4046 Quantum Mechanics	3	1st/2nd
	GEOG4016 Energy Development in China	3	2nd
<b>2</b>	<b>Graduation Project (3/6 credits)</b>		
	PHYS4898 Physics Project I	3	1st
	PHYS4899 Physics Project II	3	2nd
<b>3</b>	<b>Electives</b>		
	<a href="#">Course List</a>	--	1st/2nd



## 宁波大学理学院

1. 要求学生至少从下表第一及第二类课程中合共修读 15 学分。

2. 课程组合及学分分佈：

Type	Course Code	Credit	Semester
<b>1</b>	<b>Physics Courses (9-12 credits)</b>		
	BIOL2035 Introduction to Environmental Sciences	3	2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st
	PHYS2007 Mathematical Methods for Physical Sciences	4	2nd
	PHYS2115 Electronics	3	1st
	PHYS3027 Intermediate Electromagnetism	3	2nd
	PHYS3035 Energy and Thermodynamics	3	1st
	PHYS3036 Mechanics	3	1st/2nd
	PHYS4015 Introduction to Intellectual Properties	2	1st/2nd
	PHYS4025 Solid State Physics I	3	1st/2nd
	PHYS4027 Computational Physics	3	1st/2nd
	PHYS4035-7 Topics in Energy Science I, II and III	3	1st/2nd
	PHYS4045 Electromagnetic Waves and Optics	3	1st/2nd
	PHYS4046 Quantum Mechanics	3	1st/2nd
	GEOG4016 Energy Development in China	3	2nd
<b>2</b>	<b>Graduation Project (3/6 credits)</b>		
	PHYS4898 Physics Project I	3	1st
	PHYS4899 Physics Project II	3	2nd
<b>3</b>	<b>Electives</b>		
	<a href="#">Course List</a>	--	1st/2nd