

**2018 Fall Course timetable (for reference only)**

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Science	PG	5410	Quantum Mechanics (I)	3	3
College of Science	PG	5411	Electrodynamics (I)	3	3
College of Science	PG	5412	Classical Mechanics	3	3
College of Science	PG	5413	Seminar	1	2
College of Science	PG	5414	Quantum Field Theory (I)	3	3
College of Science	PG	5415	Special Topics on Superconducting & Magnetic Thin Film	3	3
College of Science	PG	5416	Numerical Experiment Recitation	3	3
College of Science	PG	5417	Seminar in High Energy Physics	1	1
College of Science	PG	5418	Topics in Lattice Gauge Theory	3	3
College of Science	PG	5419	Biophysics	3	3
College of Science	PG	5420	Solid State Physics (I)	3	3
College of Science	PG	5422	Particle Physics(II)	3	3
College of Science	PG	5995	Computational Atomic Physics	3	3
College of Science	UG	0512	Physics(I)	4	4
College of Science	UG	0514	Physics (I)	4	4
College of Science	UG	0522	Physics(I)	4	4
College of Science	PG	5399	Seminar	0	3
College of Science	PG	5406	Statistical Methods in Finance	3	3
College of Science	UG	0312	Calculus (I)	4	4
College of Science	UG	0412	Calculus (I)	4	4
College of Science	PG	5906	Program Colloquium	1	2
College of Science	PG	5353	Colloquium	1	2
College of Science	PG	5355	Graphene and Topological Insulators	3	3
College of Science	PG	5357	Quantum Mechanics ( I )	3	3
College of Science	PG	5358	Advanced Solid State Physics (I)	3	3
College of Science	UG	1406	Experimental Physics(II)	2	4
College of Science	PG	5384	Seminar	1	2
College of Science	PG	5385	Seminar	1	2
College of Science	PG	5386	Seminar	1	2
College of Science	PG	5387	Seminar	1	2
College of Science	PG	5392	Advanced Organic Chemistry(I)	3	3
College of Science	PG	5396	Mass Spectrometry	3	3
College of Science	PG	5440	Current Topics in Emergent Materials and Devices	3	3
College of Science	UG	1437	Chemistry (I)	3	3
College of Science	UG	1450	Applied Mathematics	3	3
College of Science	UG	1454	Organic Chemistry(III)	3	3
College of Science	UG	1465	Seminar C (1)	1	2
College of Science	UG	1466	Seminar A (I)	1	2
College of Science	UG	1467	Seminar B (I)	1	2
College of Science	PG	5424	Quantum Chemistry	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Science	PG	5425	Chemical Thermodynamics	3	3
College of Science	PG	5426	Seminar	1	2
College of Science	PG	5367	Real Analysis (I)	3	4
College of Science	PG	5371	Topics in Discrete Maths.(I)	0	2
College of Photonics	PG	5145	Geometrical Optics	3	3
College of Photonics	PG	5164	Introduction to Photonics Technologies	3	3
College of Photonics	PG	5915	Seminar-Ph.D.	1	3
College of Photonics	PG	5150	Low-dimensional nanostructures for Optoelectronics	3	3
College of Photonics	PG	4081	Seminar	1	3
College of Photonics	PG	5155	Biophotonics Technology	3	3
College of Photonics	PG	5160	Nanophotonics & Metamaterials	3	3
College of Photonics	PG	5171	Optical Microscopy	3	3
College of Management	PG	4005	Semiconductor Manufacturing Management	3	3
College of Management	PG	4010	Linear Programming	3	3
College of Management	PG	4011	Statistical Inference	3	3
College of Management	PG	4013	The Theory and Application of Scheduling	3	3
College of Management	PG	5490	Probability	3	3
College of Management	PG	5496	Stochastic Processes	3	3
College of Management	PG	5624	Global IP Management & Business Law	3	3
College of Management	PG	5625	Enterprise Accounting	3	3
College of Management	PG	5626	Industry Competition Analysis and Strategy	3	3
College of Management	PG	5627	Global Business Management and Strategy	3	3
College of Management	PG	5628	Marketing Management	3	3
College of Management	PG	5629	Information Management	3	3
College of Management	PG	5630	Organizational Behavior	3	3
College of Management	PG	5631	Globalization Seminar	1	1
College of Management	PG	5632	MBA Thesis	2	2
College of Management	PG	5633	Entrepreneurship and Global Business Competition	3	3
College of Management	PG	5516	Creativity and Innovation Management	3	3
College of Management	PG	5522	Research in Emerging Technology and IP Management	3	3
College of Management	PG	5523	Social Innovation and Entrepreneurship	3	3
College of Management	PG	5934	Patent and Innovation Strategy	3	3
College of Management	PG	5969	Literature Analysis on Technology Management	3	3
College of Management	PG	4020	Research Methods	3	3
College of Management	PG	4024	Consumer Decision Science	3	3
College of Management	PG	5535	Human Resource Management	3	3
College of Management	PG	5920	Modern Marketing Perspectives	3	3
College of Management	PG	4015	Doctoral Seminar (I)	1	2

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Management	PG	4016	Doctoral Seminar(II)	1	2
College of Management	PG	5500	The Theory and Design of Digital Content	3	3
College of Management	PG	5501	Advanced Computer Algorithms	3	3
College of Management	PG	5503	Economics and Computation	3	3
College of Management	PG	5506	Advanced Management Information Systems	3	3
College of Management	PG	5507	Information Security	3	3
College of Management	PG	4031	Seminar in finance for doctoral students A	1	2
College of Management	PG	4032	Seminar in finance for doctoral students B	0	2
College of Management	PG	5557	Financial Time Series Analysis	3	3
College of Management	PG	5483	Research Seminar	1	2
College of Management	PG	5475	Sustainable Transportation Planning	3	3
College of Management	PG	5479	Intelligent Transportation Systems	3	3
College of Management	PG	5480	Traffic Flow Theory	3	3
College of Management	PG	5488	Transportation Econometrics	3	3
College of Management	PG	5455	Integrated Marketing Communications	3	3
College of Management	PG	5460	Intermediate Accounting (1)	3	3
School of Law	PG	5170	International Commercial Arbitration: Case Studies	3	3
School of Law	PG	5183	U.S. Tort Law	3	3
School of Law	PG	5187	International Economic Law	3	3
College of Hakka Studies	UG	1703	Taiwan Society and Culture	3	3
College of Hakka Studies	PG	5926	Social Media and Communication Research	3	3
College of Hakka Studies	UG	1716	Cyber Community and Culture	3	3
College of Electrical and Computer Engineering	PG	5121	Introduction to Ultrasound and its Applications	3	3
College of Electrical and Computer Engineering	PG	5122	Biomedical Micro Analysis Systems	3	3
College of Electrical and Computer Engineering	PG	5124	Modern Bioelectricity	3	3
College of Electrical and Computer Engineering	PG	5125	Introduction to Stem Cells and Regenerative Medicine	3	3
College of Electrical and Computer Engineering	PG	5092	Electronic Circuits for Display	3	3
College of Electrical and Computer Engineering	PG	5096	Introduction to Metaphotonics	3	3
College of Electrical and Computer Engineering	PG	5108	The Optical Properties of Materials	3	3
College of Electrical and Computer Engineering	PG	5109	Geometrical Optics	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Electrical and Computer Engineering	UG	1133	Signals and Systems	3	3
College of Electrical and Computer Engineering	UG	1134	The Optical Properties of Materials	3	3
College of Electrical and Computer Engineering	PG	4068	Independent Study	1	3
College of Electrical and Computer Engineering	PG	4069	Seminar	0	2
College of Electrical and Computer Engineering	UG	1018	Linear Algebra	3	3
College of Electrical and Computer Engineering	UG	1022	Logic Design	3	3
College of Electrical and Computer Engineering	UG	1027	Electronics (I)	3	3
College of Electrical and Computer Engineering	UG	1040	Principles of Communication Systems	3	3
College of Electrical and Computer Engineering	UG	1048	Semiconductor Device Physics	3	3
College of Electrical and Computer Engineering	PG	5012	Computer Architecture	3	3
College of Electrical and Computer Engineering	PG	5017	Semiconductor Physics and Devices (I)	3	3
College of Electrical and Computer Engineering	PG	5026	Nanometer Scale Electronic Devices	3	3
College of Electrical and Computer Engineering	PG	5028	Intelligent Fog Computing Systems and Designs	3	3
College of Electrical and Computer Engineering	PG	5031	Solar Cell: Physics and Technology	3	3
College of Electrical and Computer Engineering	PG	5033	Image Processing	3	3
College of Electrical and Computer Engineering	PG	5037	Special Topics in Computer Aided Design	3	4
College of Electrical and Computer Engineering	PG	5039	Digital Integrated Circuits	3	3
College of Electrical and Computer Engineering	PG	5717	Radio-Frequency VLSI Design	3	3
College of Electrical and Computer Engineering	PG	5724	Microwave Circuits	3	3
College of Electrical and Computer Engineering	PG	5064	Stochastic Processes	3	3
College of Electrical and Computer Engineering	PG	5066	Information Theory	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Electrical and Computer Engineering	PG	5067	Adaptive Signal Processing	3	3
College of Electrical and Computer Engineering	PG	5075	Semiconductor Device Physics	3	3
College of Electrical and Computer Engineering	PG	5083	Model-based Communication IC Design	3	3
College of Electrical and Computer Engineering	PG	5084	Deep Learning	3	3
College of Electrical and Computer Engineering	PG	5158	Optimization Theory and Application	3	3
College of Electrical and Computer Engineering	PG	5047	Mobile Robots	3	3
College of Electrical and Computer Engineering	PG	5052	Digital Signal Processing	3	3
College of Electrical and Computer Engineering	PG	5088	Theory and Modeling of Semiconductor Nanostructures	3	3
College of Electrical and Computer Engineering	PG	5090	UAV Networks and Communications	3	3
College of Electrical and Computer Engineering	PG	5165	Sigma-Delta-Modulator Data Converters	3	3
College of Electrical and Computer Engineering	UG	1065	Introduction to Computers and Programming	3	3
College of Electrical and Computer Engineering	UG	1102	Communication System Laboratory	3	3
College of Electrical and Computer Engineering	UG	1112	Biomedical Engineering Laboratory	3	3
College of Electrical and Computer Engineering	UG	1152	Circuit Theory	3	4
College of Electrical and Computer Engineering	UG	1156	Electromagnetics (II)	3	3
College of Electrical and Computer Engineering	PG	5001	Seminar	0	3
College of Electrical and Computer Engineering	PG	5002	Independent Study	1	3
College of Electrical and Computer Engineering	UG	1007	Electronics Lab. (I)	2	4
College of Electrical and Computer Engineering	UG	1732	Differential Equations	3	3
College of Electrical and Computer Engineering	UG	1736	Differential Equation	3	3
College of Engineering	PG	5285	Time Frequency Analysis and its Application to Sediment Monitoring	3	3
College of Engineering	PG	5287	Signal Process and Spectral Analysis	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Engineering	PG	5294	Advanced Mechanics of Materials	3	3
College of Engineering	PG	5304	Project Scheduling And Control	3	3
College of Engineering	PG	5379	Mechanics of Fiber-Reinforced Polymer Composite Materials	3	3
College of Engineering	UG	1300	Engineering Mathematics(I)	3	3
College of Engineering	UG	1301	Mechanics of Materials	3	3
College of Engineering	UG	1303	Hydrology	3	3
College of Engineering	PG	5306	Applied Electrochemistry	3	3
College of Engineering	PG	5310	Thermodynamics of Solid	3	3
College of Engineering	PG	5313	Semiconductor Processings	3	3
College of Engineering	PG	5314	Introduction to Nanostructured Materials	3	3
College of Engineering	PG	5315	Polymer Chemistry	3	3
College of Engineering	PG	5316	Characterization and Analysis of Polymer	3	3
College of Engineering	PG	5329	Modern Physics	3	3
College of Engineering	PG	5263	Introduction to Micro/Nanotechnology	3	3
College of Engineering	PG	5264	Experimental Methods in Fluid Mechanics	3	3
College of Engineering	PG	5265	Microfluidic System and Applications	3	3
College of Engineering	PG	5320	Environmental Biotechnology	3	3
College of Engineering	PG	5323	Environmental Toxicology	3	3
College of Engineering	PG	5325	Surface Analysis	3	3
College of Engineering	PG	5326	Air pollution and Control Technology	3	3
International College of Semiconductor Technology	PG	5967	Advanced Electronic Materials Science & Engineering	3	3
International College of Semiconductor Technology	PG	5970	Seminar	0	3
International College of Semiconductor Technology	PG	5971	Academic Dissertation Research	0	3
International College of Semiconductor Technology	PG	5972	Semiconductor Physics and Devices (I)	3	3
International College of Semiconductor Technology	PG	5973	Chip Design and Circuit Simulation	3	3
International College of Semiconductor Technology	PG	5974	Teaching Technique Practice	1	3
International College of Semiconductor Technology	PG	5975	Reliability and Failure Physics of Semiconductor Devices	3	3
International College of Semiconductor Technology	PG	5976	Transport Model of Quantum Devices	3	3
International College of Semiconductor Technology	PG	5977	Semiconductor Devices and Medical Systems	3	3
International College of Semiconductor Technology	PG	5978	Terahertz Systems	3	3
International College of Semiconductor Technology	PG	5979	VLSI Digital Signal Processing	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
International College of Semiconductor Technology	PG	5989	Transceiver Design for mmW Communication	3	3
College of Computer Science	PG	5249	3D Game Programming	3	3
College of Computer Science	PG	5251	Interactive shape manipulation	3	3
College of Computer Science	PG	5252	Entrepreneurship Realization	3	3
College of Computer Science	PG	5253	Image Processing	3	3
College of Computer Science	UG	1179	Introduction to Machine Learning	3	3
College of Computer Science	PG	4041	Special Topics Seminar A (PhD)	0	2
College of Computer Science	PG	5213	Operating System	3	3
College of Computer Science	PG	5219	Seminars	0	2
College of Computer Science	PG	5222	Distributed Algorithms	3	3
College of Computer Science	PG	5223	User-Centered Interaction Design	3	3
College of Computer Science	PG	5224	Interaction design and virtual reality	3	3
College of Computer Science	PG	5229	Machine Learning	3	3
College of Computer Science	PG	5231	Design and Analysis of PHY Software and Hardware	3	3
College of Computer Science	UG	1190	Introduction to Computers and Programming	3	5
College of Computer Science	UG	1191	Probability	3	3
College of Computer Science	UG	1192	Intro. to Computer Networks	3	3
College of Computer Science	UG	1193	Introduction to Algorithms	3	3
College of Computer Science	UG	1194	Basic Programming	0	3
College of Computer Science	UG	1195	Intro. to Compiler Design	3	3
College of Computer Science	UG	1198	Computer Science and Engineering Projects (I)	2	2

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Computer Science	UG	1199	Introduction to Operating Systems	3	3
College of Computer Science	UG	1201	Microprocessor System Lab.	3	5
College of Computer Science	UG	1206	Computer Science and Engineering Projects (II)	2	2
College of Computer Science	UG	1730	Linear Algebra	3	3
College of Computer Science	PG	5238	High Speed Networking	3	3
College of Computer Science	PG	5239	Queuing Theory	3	3
College of Computer Science	PG	5240	Network Security	3	3
College of Computer Science	PG	5241	Multimedia Communications	3	3
College of Computer Science	PG	5242	IoT/M2M Technologies and Applications	3	3
College of Computer Science	PG	5932	Data Mining	3	3
College of Biological Science and Technology	PG	5671	Fundamental Electrocardiology	3	3
College of Biological Science and Technology	PG	5677	Advanced Eletrocardiology	3	3
College of Biological Science and Technology	PG	5678	Fundamental Medical Science	3	3
College of Biological Science and Technology	PG	5681	Advanced Immunology	2	2
College of Biological Science and Technology	PG	5688	Application and Perspective of Induced Pluripotent Stem Cells	3	3
College of Biological Science and Technology	PG	4001	Special Topics Seminar A(PhD)	1	1
College of Biological Science and Technology	PG	5639	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5640	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5641	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5642	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5643	Thesis in the Biological Science and Technology	1	1



College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Biological Science and Technology	PG	5644	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5645	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5646	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5647	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5648	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5651	Experiments for Advanced Physical Biochemistry	1	3
College of Biological Science and Technology	PG	5658	Metabolic Engineering for renewable fuel and chemicals	3	3
College of Biological Science and Technology	PG	5661	Drosophila Neurobiology	2	2
College of Biological Science and Technology	PG	5668	Bio-organic Chemistry	3	3
College of Biological Science and Technology	PG	5712	Immunopharmacogenomics	3	3
College of Biological Science and Technology	PG	5713	Antibody and protein engineering	3	3
College of Biological Science and Technology	UG	1585	Biochemistry (I)	3	3
College of Biological Science and Technology	PG	4003	Special Topics Seminar B(PhD)	1	1
College of Biological Science and Technology	PG	5690	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5691	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5692	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5693	Special Topic Seminar in Bioinformatics(MS)	1	1
College of Biological Science and Technology	PG	5701	Neural Engineering	3	3
College of Biological Science and Technology	PG	5703	Statistical Thermodynamics	3	3
College of Humanities and Socail Sciences	UG	1610	English Composition (1)	2	2
College of Humanities and Socail Sciences	UG	1612	Introduction to Western Literature (1)	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Humanities and Social Sciences	UG	1613	Freshman English (1):an Introductory Approach to Literature	3	3
College of Humanities and Social Sciences	UG	1614	Communicative Skills Workshop (1)	3	3
College of Humanities and Social Sciences	UG	1615	Communicative Skills Workshop (1)	3	3
College of Humanities and Social Sciences	UG	1616	Communicative Skills Workshop (1)	3	3
College of Humanities and Social Sciences	UG	1617	Introduction to Linguistics (I)	2	2
College of Humanities and Social Sciences	UG	1622	Communicative Skills Workshop(3)	2	2
College of Humanities and Social Sciences	UG	1623	Communicative Skills Workshop(3)	2	2
College of Humanities and Social Sciences	UG	1624	Communicative Skills Workshop(3)	2	2
College of Humanities and Social Sciences	UG	1627	English Literature (1)	3	3
College of Humanities and Social Sciences	UG	1630	Advanced Writing (1)	3	3
College of Humanities and Social Sciences	UG	1634	Introduction to Speech Science	3	3
College of Humanities and Social Sciences	UG	1636	American Theatre on Film	3	3
College of Humanities and Social Sciences	UG	1640	Late Victorian Gothic	3	3
College of Humanities and Social Sciences	UG	1649	Syntax/Morphology	3	3
College of Humanities and Social Sciences	UG	1651	Phonology seminar: second language acquisition	3	3
College of Humanities and Social Sciences	PG	5771	Advanced Phonetics	3	3
College of Humanities and Social Sciences	PG	5772	Science Fiction Short Story and Film	3	3
College of Humanities and Social Sciences	PG	5773	Phonology Seminar	3	3
College of Humanities and Social Sciences	PG	5775	Japanese New Wave	3	3
College of Humanities and Social Sciences	PG	5776	20th- and 21st-Century Literature	3	3
College of Humanities and Social Sciences	PG	5921	Introduction to Inter-Asia Cultural Studies	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Humanities and Social Sciences	PG	5875	Colonial Societies and Postcolonial Theories: Historical-Comparative Perspectives	3	3
College of Humanities and Social Sciences	PG	5876	The apparatus of anthropological difference	3	3
College of Humanities and Social Sciences	PG	5877	Gilles Deleuze's Oral Philoso	1	1
College of Humanities and Social Sciences	PG	5981	Ethnographies of Southeast Asia	3	3
College of Humanities and Social Sciences	PG	5838	Seminar in Architecture(I)	1	1
College of Humanities and Social Sciences	PG	5444	Proseminar in the Early 19th-Century European Music	3	3
College of Humanities and Social Sciences	PG	5854	Applied Multivariate Analysis	3	3
College of Humanities and Social Sciences	PG	5996	Research Methodology	3	3
College of Humanities and Social Sciences	PG	5735	On-line Newspaper	3	3
College of Humanities and Social Sciences	PG	5745	Seminar on Communication English: Web News and Talk Shows	3	3
College of Humanities and Social Sciences	PG	5747	Mass Media and the Information Society	3	3
College of Humanities and Social Sciences	UG	7118	Freshman English (I)	2	2
College of Humanities and Social Sciences	UG	7142	Advanced English Listening and Discussion	2	2
College of Humanities and Social Sciences	UG	7143	Advanced English Listening and Discussion	2	2
College of Humanities and Social Sciences	UG	7155	Advanced English Reading and Discussion	2	2
College of Humanities and Social Sciences	UG	7165	Technical English	2	2
College of Humanities and Social Sciences	UG	7166	Technical English	2	2
College of Humanities and Social Sciences	UG	7191	Public speaking & Negotiation	2	2
Others	UG	6119	Contemporary World	2	2
Others	UG	6125	Introduction to Philosophy	2	2
Others	UG	6130	Introduction to Philosophy	2	2
Others	UG	6146	Life and Biomedicine	2	2
Others	UG	6159	Exploring History of Science. Part I:Science in Ancient Worlds	2	2

College	Level	Course Code	Course Name	Credit	Class Hour/Week
Others	UG	6167	Exploring History of Science. Part 2: From pre-modern to modern science	2	2
Others	UG	6181	Introduction to Psychology	2	2
Others	UG	6340		2	2
Others	UG	6386	Biochemistry and Pharmaceutical	2	2

**2019 Spring Course timetable (for reference only)**

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Science	PG	5432	Quantum Mechanics (II)	3	3
College of Science	PG	5433	Seminar	1	2
College of Science	PG	5434	Quantum Field Theory (II)	3	3
College of Science	PG	5435	Statistical Mechanics (I)	3	3
College of Science	PG	5436	Topics in Computational Physics	3	3
College of Science	PG	5437	Quantum Field Theory (III)	3	3
College of Science	PG	5440	Seminar in High Energy Physics	1	1
College of Science	PG	5442	Special Topics in Quantum Chromodynamics	3	3
College of Science	PG	5445	Solid State Physics (II)	3	3
College of Science	UG	0512	Physics(II)	4	4
College of Science	UG	0513	Physics (II)	4	4
College of Science	UG	0514	Physics (II)	4	4
College of Science	UG	0516	Physics (II)	4	4
College of Science	UG	0522	Physics(II)	4	4
College of Science	UG	0561	Physics (I)	4	4
College of Science	PG	5424	Time Series	3	3
College of Science	PG	5427	Causal Inference	3	3
College of Science	UG	0312	Calculus (II)	4	4
College of Science	UG	0412	Calculus (II)	4	4
College of Science	PG	5372	Colloquium	1	2
College of Science	PG	5374	Statistical Field Theory and Quantum Phase Transitions	3	3
College of Science	PG	5376	Advanced Solid State Physics (II)	3	3
College of Science	PG	5378	Labview Programming(I)	3	3
College of Science	UG	1359	Colloquium	1	2
College of Science	UG	1367	Thermal Physics	3	3
College of Science	UG	1368	Experimental Physics(II)	2	4
College of Science	PG	5406	Seminar	1	2
College of Science	PG	5407	Seminar	1	2
College of Science	PG	5408	Seminar	1	2
College of Science	PG	5409	Seminar	1	2
College of Science	PG	5410	Seminar	1	2
College of Science	PG	5412	Organometallic Chemistry	3	3
College of Science	PG	5414	Special Topics in Polymer Synthesis	3	3
College of Science	PG	5415	Advanced Organic Chemistry(II)	3	3
College of Science	PG	5416	Drug Design and Development	3	3
College of Science	PG	5417	Basics for Writing Academic English	3	3
College of Science	PG	5418	Spectroscopy of Organometallic Compounds	3	3
College of Science	PG	5419	Polymer Crystal Structure Morphology and Defects	2	2

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Science	UG	1406	Chemistry (II)	3	3
College of Science	UG	1434	Seminar B (2)	1	2
College of Science	UG	1435	Seminar C (2)	1	2
College of Science	PG	5449	Molecular Spectroscopy	3	3
College of Science	PG	5450	Chemical Kinetics and Dynamics	3	3
College of Science	PG	5451	Seminar	1	2
College of Science	PG	5453	Advanced Spectroscopy	3	3
College of Science	PG	5454	Fundamental Skills for Chemical Research	2	2
College of Science	PG	5455	Laser Manipulation and Fabrication of Molecular and Biomatters	3	3
College of Science	PG	5383	Real Analysis (II)	3	3
College of Science	PG	5386	Topics in Discrete Maths.(II)	0	2
College of Photonics	PG	5138	Fouries Optics	3	3
College of Photonics	PG	5139	Nonlinear Optics	3	3
College of Photonics	PG	5140	Green Energy Science and Technology	3	3
College of Photonics	PG	5156	Technical Writing in English	2	3
College of Photonics	PG	5162	Seminar-Ph.D.	1	3
College of Photonics	PG	5146	Solid-state Laser Engineering	3	3
College of Photonics	PG	4561	Seminar	1	3
College of Photonics	PG	5148	Experimental Photonics	3	3
College of Management	PG	5515	Queueing Theory with Applications	3	3
College of Management	PG	5516	Stochastic Programming	3	3
College of Management	PG	5522	Multiple Criteria Decision Making	3	3
College of Management	PG	5664	Business Development for Start-ups	3	3
College of Management	PG	5665	Data Science and Decision Support	3	3
College of Management	PG	5666	Financial Management and Investment	3	3
College of Management	PG	5667	Enterprise Growth and M&A	3	3
College of Management	PG	5668	Operation and Supply Chain Management	3	3
College of Management	PG	5669	Strategic Management	3	3
College of Management	PG	5670	Globalization Seminar	1	1
College of Management	PG	5545	Entrepreneurship and New Product Development	3	3
College of Management	PG	5549	Technology and Logic	3	3
College of Management	PG	5551	Methods and topics in Technology Management Research	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Management	PG	5552	Technological Innovation and Management of Intellectual property	3	3
College of Management	PG	5553	Fundamentals of Patent Analytics and Technological Forecast	3	3
College of Management	PG	5555	Intellectual Property Management and Practice	3	3
College of Management	PG	5559	Industry Analysis and Innovation	3	3
College of Management	PG	5574	Production and Operations Management	3	3
College of Management	PG	5579	Technology Entrepreneurship	3	3
College of Management	PG	5581	Branding and Integrated Marketing Communications	3	3
College of Management	PG	5582	Product & Service Design in Subsistence Marketplaces	3	3
College of Management	PG	4580	Research Methodology for PhD Dissertation	3	3
College of Management	PG	5528	Scheduling Theory and Applications	3	3
College of Management	PG	5532	Game theory and Strategy	3	3
College of Management	PG	4590	Seminar in finance for doctoral students B	0	2
College of Management	PG	4591	Seminar in finance for doctoral students A	1	2
College of Management	PG	5502	Transportation Safety	3	3
College of Management	PG	5506	Research Seminar	1	2
College of Management	PG	5562	Logistics Operation Planning Models	3	3
College of Management	PG	5482	Credit Risk and Its Applications	3	3
College of Management	PG	5488	Statistical Methods and Data Analysis	3	3
College of Management	PG	5490	Operations Research	3	3
College of Management	PG	5495	Information Management	3	3
College of Management	PG	5496	Research Methodology for Social Science	3	3
College of Management	UG	1447	Principles of Marketing	3	3
College of Management	UG	1448	Principles of Marketing	3	3
College of Management	UG	1527	Management	3	3
College of Management	PG	5613	Research Methodology for Social Science	3	3
School of Law	PG	5166	International Moot Court Competition:Advanced Issues	3	3
School of Law	PG	5167	Introduction to Anglo-American Law	3	3
School of Law	PG	5174	American Constitutional Law	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
School of Law	PG	5184	Japanese Commercial Law	3	3
School of Law	PG	5187	English Legal Writing	3	3
School of Law	PG	5210	International business law and IP management	2	2
School of Law	PG	5215	U.S. Corporate Law	3	3
School of Law	PG	5217	U.S. Patent Trial Practice	3	3
College of Hakka Studies	UG	1667	Human-computer Interaction	3	3
College of Hakka Studies	UG	1677	Information and Communication Technology Policies in Everyday Life	3	3
College of Hakka Studies	UG	1678	Social Media and Communication	3	3
College of Electrical and Computer Engineering	PG	5106	Neural Prostheses	3	3
College of Electrical and Computer Engineering	PG	5113	Advanced Biomedicine Sensing and Oncology	3	3
College of Electrical and Computer Engineering	PG	5100	Laser principles and ultrafast optics	3	3
College of Electrical and Computer Engineering	PG	5102	Introduction to Optical Systems	3	3
College of Electrical and Computer Engineering	PG	5103	Optical Fiber Communication	3	3
College of Electrical and Computer Engineering	PG	5104	Evolutionary Computation	3	3
College of Electrical and Computer Engineering	PG	4420	Seminar	0	2
College of Electrical and Computer Engineering	PG	4421	Independent Study	1	3
College of Electrical and Computer Engineering	UG	1026	Probability and Statistics	3	3
College of Electrical and Computer Engineering	UG	1027	Electronics (II)	3	3



College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Electrical and Computer Engineering	UG	1035	Electromagnetics	3	3
College of Electrical and Computer Engineering	UG	1053	Computer Organization	3	3
College of Electrical and Computer Engineering	UG	1054	Digital Signal Processing	3	3
College of Electrical and Computer Engineering	PG	5009	Memory Systems	3	3
College of Electrical and Computer Engineering	PG	5020	Nanometer RF Engineering	3	3
College of Electrical and Computer Engineering	PG	5021	VLSI Testing and Design for Testability	3	3
College of Electrical and Computer Engineering	PG	5026	Optimization Theory and Applications	3	3
College of Electrical and Computer Engineering	PG	5027	Integrated Circuit Design Laboratory	3	4
College of Electrical and Computer Engineering	PG	5029	Bio-Medical Circuits and Systems	3	3
College of Electrical and Computer Engineering	PG	5936	Artificial Intelligence	3	3
College of Electrical and Computer Engineering	PG	5065	Computer Communication Networks	3	3
College of Electrical and Computer Engineering	PG	5071	Quantum Mechanics	3	3
College of Electrical and Computer Engineering	PG	5073	Statistical Mechanics	3	3
College of Electrical and Computer Engineering	PG	5074	Semiconductor Memory	3	3
College of Electrical and Computer Engineering	PG	5077	Advanced Communication System Simulation and Experiments	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Electrical and Computer Engineering	PG	5047	Digital Signal Processing	3	3
College of Electrical and Computer Engineering	PG	5050	Analog IC Design	3	3
College of Electrical and Computer Engineering	PG	5051	Image Processing	3	3
College of Electrical and Computer Engineering	PG	5053	Self-Driving Cars	3	3
College of Electrical and Computer Engineering	PG	5081	Cloud Computing and Big Data Analytics	3	3
College of Electrical and Computer Engineering	UG	1146	Linear Algebra	3	3
College of Electrical and Computer Engineering	UG	1149	Probability	3	3
College of Electrical and Computer Engineering	UG	1153	Electromagnetics (I)	3	3
College of Electrical and Computer Engineering	PG	5001	Seminar	0	3
College of Electrical and Computer Engineering	PG	5002	Independent Study	1	3
College of Electrical and Computer Engineering	UG	1005	Electronics Lab. (II)	2	4
College of Electrical and Computer Engineering	PG	5132	Practice in Entrepreneurship	3	3
College of Electrical and Computer Engineering	UG	1034	Signals and Systems	3	3
College of Electrical and Computer Engineering	UG	1691	Signals and Systems	3	3
College of Engineering	PG	5299	Computational Technique and Its Application for Structural Health Moni	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Engineering	PG	5300	Geophysical Exploration and Data Analysis	3	3
College of Engineering	PG	5303	Finite Element Methods	3	3
College of Engineering	PG	5305	Advanced Steel Structures	3	3
College of Engineering	PG	5311	Open Channel Hydraulics	3	3
College of Engineering	UG	1283	Soil Mechanics	3	3
College of Engineering	UG	1285	Theory of Structures (I)	3	3
College of Engineering	PG	5320	Materials for Energy Storage and Conversion Device	3	3
College of Engineering	PG	5323	Organic Electro-Optical Display Materials and Devices	3	3
College of Engineering	PG	5335	Intro. to Compound Semiconductor Device & Process	3	3
College of Engineering	UG	1311	Introduction to Materials Science and Engineering (II)	3	3
College of Engineering	PG	5275	Heat Convection	3	3
College of Engineering	PG	5283	Viscous Fluid Flow	3	3
College of Engineering	UG	1257	Heat Transfer	3	3
College of Engineering	PG	5338	Environmental Nanotechnology for Water Treatment	3	3
College of Engineering	PG	5344	Theory and Practice of Gaseous Pollution Control Devices	3	3
College of Engineering	PG	5345	Theory and Practice of Particulate Control Equipment	3	3
College of Engineering	PG	5346	Surface Chemistry	3	3
International College of Semiconductor Technology	PG	5925	Seminar	0	3
International College of Semiconductor Technology	PG	5926	Semiconductor Physics and Devices (I)	3	3
International College of Semiconductor Technology	PG	5927	Academic Dissertation Research	0	3
International College of Semiconductor Technology	PG	5928	Introduction to Amplifier Design for Radio-Frequency Communication Applications	3	3
International College of Semiconductor Technology	PG	5929	Memory Circuits and System	3	3
International College of Semiconductor Technology	PG	5930	Digital Signal Processing for Communication Systems	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
International College of Semiconductor Technology	PG	5931	Basics of Quantum Integrated Circuits	3	3
International College of Semiconductor Technology	PG	5932	Power semiconductor devices: Device design, Characteristics, and Reliability	3	3
International College of Semiconductor Technology	PG	5933	Liquid Biopsy (I)	3	3
International College of Semiconductor Technology	PG	5934	Introduction to CMOS circuit design	3	3
College of Computer Science	PG	5258	Computer Vision	3	3
College of Computer Science	UG	1162	Technology Entrepreneurship	3	5
College of Computer Science	UG	1163	MATLAB Programming Language	3	3
College of Computer Science	UG	1178	Introduction to Computer Security	3	3
College of Computer Science	PG	4595	Special Topics Seminar A (PhD)	0	2
College of Computer Science	PG	5225	Computer Architecture	3	3
College of Computer Science	PG	5226	Operating System	3	3
College of Computer Science	PG	5227	Seminars	0	2
College of Computer Science	PG	5228	Artificial Intelligence	3	3
College of Computer Science	PG	5231	Advanced Programming in the UNIX Environment	3	3
College of Computer Science	PG	5234	Future Interactive Technology	3	3
College of Computer Science	PG	5235	Machine Learning	3	3
College of Computer Science	PG	5236	Algorithms	3	3
College of Computer Science	PG	5239	Operating System Design and Implementation (OSDI)	3	6
College of Computer Science	PG	5241	Selected Topics in Intractable Problems	3	3
College of Computer Science	UG	1183	Computer Science and Engineering Projects (II)	2	2

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Computer Science	UG	1189	Basic Programming	0	3
College of Computer Science	UG	1192	Data Structures and Object-oriented Programming	3	5
College of Computer Science	UG	1193	Discrete Mathematics	3	3
College of Computer Science	UG	1194	Digital Circuit Design	3	3
College of Computer Science	UG	1195	Computer Organization	3	3
College of Computer Science	UG	1198	Computer Science and Engineering Projects (I)	2	2
College of Computer Science	UG	1206	Computer Organization	3	3
College of Computer Science	PG	5247	Computer Networks	3	3
College of Computer Science	PG	5248	Internet Router	3	3
College of Computer Science	PG	5249	Data Center Networking Technology	3	3
College of Computer Science	PG	5250	Wireless Communication Systems	3	3
College of Computer Science	PG	5262	Information Theory and Data Compression Practice	3	3
College of Biological Science and Technology	PG	5725	Hearing Sciences	3	3
College of Biological Science and Technology	PG	5727	Translational Medicine:Pathology	2	2
College of Biological Science and Technology	PG	5733	Cancer Stem-like Cells and Target	3	3
College of Biological Science and Technology	PG	5737	Advanced Molecular Oncology	3	3
College of Biological Science and Technology	PG	5741	Intermediate Electrocardiology	3	3
College of Biological Science and Technology	PG	5743	Seminars in Electrocardiology	3	3
College of Biological Science and Technology	PG	5745	Clinical Trials & Evidence-based Medicine	3	3

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Biological Science and Technology	PG	4570	Special Topics Seminar A(PhD)	1	1
College of Biological Science and Technology	PG	5674	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5675	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5676	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5677	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5678	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5679	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5680	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5681	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5682	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5683	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5684	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5685	Special Topic Seminar	1	1
College of Biological Science and Technology	PG	5686	Special Topic Seminar	1	1
College of Biological Science and Technology	PG	5687	Special Topic Seminar	1	1

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Biological Science and Technology	PG	5688	Special Topic Seminar	1	1
College of Biological Science and Technology	PG	5697	Application and Perspective of Induced Pluripotent Stem Cells	3	3
College of Biological Science and Technology	PG	5701	Cell Biology Application of Microscopy	2	2
College of Biological Science and Technology	UG	1549	Biochemistry (II)	3	3
College of Biological Science and Technology	PG	4405	Special Topics Seminar B(PhD)	1	1
College of Biological Science and Technology	PG	5754	Protein Conformational Dynamics and Function	2	2
College of Biological Science and Technology	PG	5763	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5764	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5765	Thesis in the Biological Science and Technology	1	1
College of Biological Science and Technology	PG	5766	Special Topic Seminar in Bioinformatics(MS)	1	1
College of Humanities and Social Sciences	UG	1581	Introduction to Western Literature (2)	3	3
College of Humanities and Social Sciences	UG	1582	Communicative Skills Workshop (2)	3	3
College of Humanities and Social Sciences	UG	1583	Communicative Skills Workshop (2)	3	3
College of Humanities and Social Sciences	UG	1584	Communicative Skills Workshop (2)	3	3
College of Humanities and Social Sciences	UG	1587	English Composition (2)	2	2
College of Humanities and Social Sciences	UG	1588	English Composition (2)	2	2
College of Humanities and Social Sciences	UG	1589	Introduction to Linguistics (II)	2	2

College	Level	Course Code	Course Name	Credit	Class Hour/Week
College of Humanities and Social Sciences	UG	1595	English Literature (2)	3	3
College of Humanities and Social Sciences	UG	1597	Advanced Writing (2)	3	3
College of Humanities and Social Sciences	UG	1600	Travel English	3	3
College of Humanities and Social Sciences	UG	1601	Fashion, Clothing and the Body in Medieval Literature	3	3
College of Humanities and Social Sciences	UG	1604	Sociolinguistics	3	3
College of Humanities and Social Sciences	PG	5800	Phonology	3	3
College of Humanities and Social Sciences	PG	5801	Research Practicum	3	3
College of Humanities and Social Sciences	PG	5807	Theory of the Novel	3	3
College of Humanities and Social Sciences	PG	5890	The Magic of 'People'	1	1
College of Humanities and Social Sciences	PG	5855	Seminar in Architecture(II)	1	1
College of Humanities and Social Sciences	PG	5856	Seminar in Architecture(IV)	1	1
College of Humanities and Social Sciences	PG	5893	Thesis Writing	3	3
College of Humanities and Social Sciences	PG	5894	Language Learning Strategies	3	3
College of Humanities and Social Sciences	PG	5895	Globalization and English Language Teaching	3	3
College of Humanities and Social Sciences	PG	5896	Teaching Reading:Theory and Practice	3	3
College of Humanities and Social Sciences	PG	5823	Between sight and sound: illusion and music	3	3
College of Humanities and Social Sciences	PG	5825	The Cultural Politics of Chinese Music	3	3
College of Humanities and Social Sciences	PG	5867	Human Motivation and E-learning	3	3
College of Humanities and Social Sciences	PG	5871	Special Topic in Advanced Structural Equation Modeling	3	3
College of Humanities and Social Sciences	PG	5779	Seminar on Communication English: Recreation and Travel	3	3
College of Humanities and Social Sciences	PG	5783	Digital TV Production	3	3
College of Humanities and Social Sciences	PG	5795	Designing novel interactions: research topics in human-computer interaction	3	3



College	Level	Course Code	Course Name	Credit	Class Hour/Week
Others	UG	6119	Contemporary World	2	2
Others	UG	6121	Introduction to Philosophy	2	2
Others	UG	6125	Introduction to Philosophy	2	2
Others	UG	6143	Life and Biomedicine	2	2
Others	UG	6154	Exploring History of Science. Part I: Science in Ancient Worlds	2	2
Others	UG	6161	Exploring History of Science. Part 2: From pre-modern to modern science	2	2
Others	UG	6178	Introduction to Psychology	2	2
Others	UG	6310	Cinema and Borders	2	2
Others	UG	6380	Forbidden Music	2	2