

河海大學

博士研究生培養方案 (2014 版)



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2014 版博士研究生培养方案说明

2014

一、培养目标

二、学制和学习年限

4

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2

三、学分要求和课程设置

13 - 15

9 - 11

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四、科学实践和教学环节

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五、论文工作



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社会学(0303)

(Sociology)

学科门类:法学(03) 一级学科:社会学(0303)

一、学科简介

2003

2005

2012

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二、培养目标

三、主要研究方向

1. Migration and Resettlement Sociology
2. Rural and Urban Sociology
3. Environmental Sociology
4. Social Assessment
5. Law Sociology
6. Population Sociology
7. Social Work

四、学制和学习年限

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五、学分要求和课程设置

13 - 15

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六、教学环节

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七、论文工作

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	00D0001	First Foreign Language	48	2					
	66D0001	Marxism in Contemporary China	36	2			/		
9 – 11	15D0101	Social Theory	32	2			/		2 – 4
	15D0102	Social Research Methodology	32	2			/		
	15D0103	Studies on Chinese Society	32	2			/		
	15D0104	Special Topic on Sociology	16	1		/	/		
	15D0105	Migration and Resettlement Study	32	2		/	/		
	15D0106	Urban and Rural Sociology	32	2		/	/		
	15D0107	Sociology on E ul o l							

本学科推荐阅读的重要书目、专著和学术期刊

1	. <	>	C //	.	. 1995 1 - 10.
2	.	M .	.	2004.	
3	.	M .	.	1996.	
4	.	M .	.	1995.	
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6	.	M .	.	1999.	
7	.	M .	.	2010.	
8	.	M .	.	2004.	
9	.	M .	.	2004.	
10	.	M .	.		2002.
11	.	M .	.	1988.	
12	.	M .	.	2004.	
13	.	M .	.	2006.	
14	.	M .	.	1989.	
15	.	M .	.	2008.	
16	.	M .	.	1991.	
17	.	M .	.	2008.	
18	.	M .	.	2001.	
19	.	M .	.	2008.	
20	.	M .	.	2004.	
21	.	M .	.	1998.	
22	.	M .	.		1998.
23	.	I II M .	.	1999.	
24	.	M .	.	2003.	
25	.	M .	.	2003.	
26	.	M .	.	2002.	
27	.	M .	.	1999.	
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29	.	1 - 4 C .	.	1991.	
30	.	M .	.	1998.	
31	.	M .	.	2001.	
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33	.	M .	.	2006.	
34	.	M .	.	2011.	
35	.	M .	.	1999.	
36	?	M .	.		2001.
37	.	M .	.	2003.	
38	.	M .	.		1998.
39	.	M .	.	2000.	
40	.	M .	.	2008.	
41	.	-	M .	.	1998.
42	.	-	M .	.	
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44					

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47	American Journal of Sociology
48	American Sociological Review
49	European Sociological Review
50	Social Force
51	Annual Review of Sociology
52	China Quarterly
53	Modern China

马克思主义基本原理 (030501)

(Marxist Basic Theory)

学科门类:法学(03) 一级学科:马克思主义理论(0305)

一、学科简介

	2006				2007
	89	22	2012		
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	1		1	2005	5
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CSSCI	200	20			

二、培养目标

三、主要研究方向

1. Study of Marxist Basic Theory
2. Study of Marxism Education

- 3. Study of Marxism Classical Literature
- 4. Study of Marxism's Development in China
- 5. Study of Marxism Legal Theory

四、学制和学习年限

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五、学分要求和课程设置

	13 - 15	9 - 11
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六、教学环节

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	17D0309	Intensive Readings of Original Works of Marxism	32	2		/	/			2 – 4
	17D0301	Topics in History of Marxism	32	2		/	/			
	17D0302	Topics in Marxist Theory Frontier	16	1		/	/			
	17D0303	Topics in Marxism's development in China	32	2		/	/			2
	17D0304	Topics in Marxist Basic Theory	32	2		/	/			
4		Second Foreign Language	48	2						
	17D0305	Topics in Western Marxism	16	1		/	/			2
	17D0306	Theory and Practice in Marxist Jurisprudence	32	2		/	/			
	17D0307	Study of Marxism and Contemporary Issues	32	2		/	/			
	17D0308	Study of Marxism Education	32	2		/	/			
	66D0002	Intensive Readings of Original Works of Marxism	18	1		/	/			
			32	2		/	/			
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	99D0101									
	99D0102									

46	2000 – 2013
47	2000 – 2013
48	2000 – 2013
49	2000 – 2013
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思想政治教育 (030505)

(Ideological and Political Education)

学科门类:法学(03) 一级学科:马克思主义理论(0305)

一、学科简介

	1962	1985
1997	1993 2005	
2012		
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200		

二、培养目标

三、主要研究方向

1. Theory and Methods of Ideological and Political Education
2. Comparative Ideological and Political Education
3. Sociology of Ideological and Political Education
4. Ideological and Political Education & Affairs Management of College Students
5. Ideological and Political Education and Traditional Culture

四、学制和学习年限

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五、学分要求和课程设置

13 - 15

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六、教学环节

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	17D0309	Intensive Readings of Original Works of Marxism	32	2		/	/			2 – 4
	17D0301	Topics in History of Marxism	32	2		/	/			
	17D0302	Special Topic on Marxist Theory	16	1		/	/			
	17D0601	Frontier of Ideological and Political Education	32	2		/	/			2
	17D0602	Topics in Comparative Ideological and Political Education	32	2		/	/			
4		Second Foreign Language	48	2						
	17D0603	Ideological and Political Education & Affairs Management of College Students	32	2		/	/			2
	17D0604	Traditional Culture and Ideological and Political Education	32	2		/	/			
	17D0605	Philosophy of Ideological and Political Education	32	2		/	/			
	66D0002	Intensive Readings of Original Works of Marxism	18	1		/	/			
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目和学术期刊

1	1 - 10	2009
2	1 - 4	1995
3	1 - 5	2009
4	1 - 8	1993 - 1999
5	1 - 4	1991
6	1 - 3	1993 1994
7	1 - 3	2006
8		1983
9		1992
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37		2009
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42		2012
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物理海洋学(070701)

(Physical Oceanography)

学科门类:理学(07)

一级学科:海洋科学(0707)

一、学科简介

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	03D0301	II Geophysical Fluid Dynamics II	64	4		/	/			2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	03D0302	Special Topic	16	1		/	/			
	03D0303	Modern Physical Oceanography	32	2		/	/			2
	03D0304	Marine Environmental Elements Analysis Principal	32	2		/	/			
	03D0305	Environmental Marine Dynamics	32	2		/	/			
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
	03D0306	Climate and Sea Level change	32	2		/	/			
	00D0003		32	2		/	/			
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	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 1990.
- 2 . M . 1980.
- 3 . M . 1986.
- 4 . M . 2002.
- 5 ? . M . 1999.
- 6 . M . 1992.
- 7 S. . M . 1985.
- 8 . M . 2004.
- 9 . M . 1980.
- 10 . M . 1984.
- 11 . M . 2013.
- 12 Komen G. J. et al. Dynamics and Modelling of Ocean Waves M . Cambridge University Press 1994.
- 13 McWilliams J C. Fundamentals of geophysical fluid dynamics M . Cambridge University Press 2006.
- 14 Pedlosky. M . 2002.
- 15 Pickard G L Emery W J. Descriptive physical oceanography M . Pergamon Press 1990.
- 16 Journal of Geophysical Research J .
- 17 Journal of Physical Oceanography J .
- 18 Geophysical Research Letter J .
- 19 Journal of Climate J .
- 20 Journal of Continental Shelf Research J .
- 21 Global and Planetary Change J .
- 22 J .
- 23 J .
- 24 J .

力学(0801)

(Mechanics)

学科门类:工学(08) 力学(0801)

一、学科简介

" 211 " " " " "

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二、培养目标

三、主要研究方向

1. General and Fundamental Mechanics
- 1 Nonlinear Dynamics and Control
- 2 Multiscale dynamics
- 3 Vibration Control and Intelligent Structural devices Mechanics
2. Solid Mechanics
- 1 Mechanics of Advanced Materials and Structures

tures

2 Damage and Fracture Mechanics

3 Structural mechanics and structural optimization

4 Mechanics of Composite Materials and Structures

5 Mechanical properties and behaviors of engi-

neering materials

3. Fluid Mechanics

1 Computational Fluid Mechanics

2 Environmental Fluid Mechanics

3 Experimental flow dynamics

4. Engineering Mechanics

1 Mechanics of Catastrophic Failure

2 Computational mechanics and virtual simulation

3 Experiment Detection and Strengthe-

ning of Defective Structures

4 Reliability analysis and optimization design of

engineering structures

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六、教学环节

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七、论文工作

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	00D0001	First Foreign Language	48	2					
	66D0001	Marxiam in Contemporary China	36	2			/		
	88D0001	Applied Functional Analysis	48	3					
	88D0003	Random Differential Equations	32	2					
	88D0002	Modern Methods in PDE	32	2					

88D0007 Dynamical Systems

b



	99D0103							
	99D0101							
	99D0102							

本学科推荐阅读的重要书目、专著和学术期刊

- 1 2003.
- 2 Malvern L. E. Introduction to the Mechanics of a Continuum medium New Jersey Prentice – Hall Inc. 1969
- 3 Hale J. K. Theory of Functional Differential Equations. New York Springer – Verlag 1977.
- 4 Ott E. Chaos in Dynamical Systems. New York Cambridge University Press 1993.
- 5 2001.
- 6 Hu H. Y. Wang Z. H. Dynamics of Controlled Mechanical Systems with Delayed Feedback. Heidelberg Springer – Verlag 2002.
- 7

41 AIAA Journal American Institute of Aeronautics and Astronautics.
42 Applied Mechanics Reviews American Society of Mechanical Engineers.
43 Journal of the Mechanics and Physics of Solids Elsevier.
44 Physical Review Letters American Physical Society.
45 International Journal of Plasticity. Elsevier.
46 International Journal of Solids and Structures. Elsevier.
47 International Journal of Fracture Springer.
48 Journal of Sound and Vibration. Elsevier.
49 Nonlinear Dynamics Springer.
50 Multibody System Dynamics Springer.
51 Journal of Fluid Mechanics Cambridge University Press.
52 Computational Mechanics Springer.
53 International Journal for Numerical methods in Engineering. John Wiley and Sons.
54 Journal of Geotechnical and Geoenvironmental Engineering American Society of Civil Engineers.
55 Journal of Dynamic Systems Measurement and Control American Society of Mechanical Engi-
neers.
56 Mechanics of Materials. Elsevier.
57 Nanotechnology Institute of Physics.
58 International Journal for Numerical and Analytical Methods in Geomechanics John Wiley and Sons.
59 Experimental Mechanics Sage Publications.
60 Measurement Science and Technology Institute of Physics.

现代力学数学基础(0801Z2)

(Mathematical Foundation of Modern Mechanics)

学科门类:工学(08) 一级学科:力学(0801)

一、学科简介

2013

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SCI 80 SCI Journal

of Differential Equations Discrete & Continuous Dynamical Systems – Series A Bulletin of the London Mathematical Society Physica D

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二、培养目标

三、主要研究方向

1. Nonlinear Functional Analysis and Mechanics
2. Partial Differential Equations and Mechanics
3. Dynamic systems and Mechanics
4. Computation Method and Stochastic Analysis

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	12D0101	Linear Partial Differential Equations and Applications	32	2						2 – 4
	12D0102	Introduction to Linear Differential Systems	32	2						
	12D0103	Variational Methods and Applications	32	2						
	12D0104	Lecture on New Progress in Mathematics and statistics	16	1			/			
	12D0106	Nonlinear Partial Differential Equations and Applications	32	2			/			2
	12D0107	Singular Dynamical Systems	32	2			/			
12D0108	Nonlinear Analysis	32	2			/				
4		Second Foreign Language	32	2						
	66D0002	Selected Readings in Marxist Classics	18	1			/			
	12D0110	Topic on Partial Differential Equations	32	2		/	/			2
	12D0111	Topic on Dynamical Systems	32	2		/	/			
	12D0112	Topic on Nonlinear Analysis	32	2		/	/			
			32	2		/	/			
		32	2		/	/				
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 Lee Peng Yee Lanzhou lectures on integration World Scientific 1989.
- 2 E. Zeidler Applied Functional Analysis Springes – Verlag 1995.
- 3 1998.
- 4 J. Mawhin M. Willem Critical point theory and Hamiltonian systems Springer – Verlag 1989.
- 5 Lawrence C. Evans Partial Differential Equations American Mathematical Society 1998.
- 6 Lokenath Debnath Nonlinear PDE for Scientists and Engineers Birkh user 1997.
- 7 H. K Versteeg & Malalasekera An introduction to Computational Fluid Dynamics 2000.
- 8 J. Bondy and U. Murty Graph Theory With Applications The Macmillan Press LTD 1976.
- 9 Antonio Galves Jack K. Hale Carlos Rocha Differential Equations and Dynamical Systems American Mathematical Soc. 2002.
- 10 1. SpringerLink 2. ScienceDirect SD 3. Wiley Online Library.
- 11 American Mathematical Society – MathSciNet.
- 12 Acta Mathematica Scientia
Website [http //www. sciencedirect. com/science/journal/02529602](http://www.sciencedirect.com/science/journal/02529602)
- 13 Bulletin des Sciences Mathématiques
Website [http //www. sciencedirect. com/science/journal/00074497](http://www.sciencedirect.com/science/journal/00074497)
- 14 Handbook of Differential Equations Evolutionary Equations
Website [http //www. sciencedirect. com/science/handbooks/18745717](http://www.sciencedirect.com/science/handbooks/18745717)
- 15 Journal of Differential Equations
Website [http //www. sciencedirect. com/science/journal/00220396](http://www.sciencedirect.com/science/journal/00220396)
- 16 Journal of the Franklin Institute
Website [http //www. sciencedirect. com/science/journal/00160032](http://www.sciencedirect.com/science/journal/00160032)
- 17 Journal of Functional Analysis
Website [http //www. sciencedirect. com/science/journal/00221236](http://www.sciencedirect.com/science/journal/00221236)
- 18 Journal de Mathématiques Pures et Appliquées
Website [http //www. sciencedirect. com/science/journal/00217824](http://www.sciencedirect.com/science/journal/00217824)
- 19 Journal of Computational and Applied Mathematics
Website [http //www. sciencedirect. com/science/journal/03770427](http://www.sciencedirect.com/science/journal/03770427)
- 20 Journal of Mathematical Analysis and Applications
Website [http //www. sciencedirect. com/science/journal/0022247X](http://www.sciencedirect.com/science/journal/0022247X)
- 21 Mathematical Physics with Partial Differential Equations
Website [http //www. sciencedirect. com/science/book/9780123869111](http://www.sciencedirect.com/science/book/9780123869111)
- 22 Nonlinear Analysis Theory Methods & Applications
Website [http //www. sciencedirect. com/science/journal/0362546X](http://www.sciencedirect.com/science/journal/0362546X)
- 23 Nonlinear Analysis Real World Applications
Website [http //www. sciencedirect. com/science/journal/14681218](http://www.sciencedirect.com/science/journal/14681218)
- 24 Physica D Nonlinear Phenomena
Website [http //www. sciencedirect. com/science/journal/01672789](http://www.sciencedirect.com/science/journal/01672789)
- 25 Acta Mathematica Sinica English Series
Website [http //www. springer. com/mathematics/journal/10114](http://www.springer.com/mathematics/journal/10114)
- 26 Journal of Dynamical and Control Systems

- Website [http //www. springer. com/materials/mechanics/journal/10883](http://www.springer.com/materials/mechanics/journal/10883)
- 27 Acta Applicandae Mathematicae
Website [http //www. springer. com/mathematics/journal/10440](http://www.springer.com/mathematics/journal/10440)
- 28 Journal of Dynamics and Differential Equations
Website [http //www. springer. com/mathematics/dynamical + systems/journal/10884](http://www.springer.com/mathematics/dynamical+systems/journal/10884)
- 29 Nonlinear Differential Equations and Applications NoDEA
Website [http //www. springer. com/birkhauser/mathematics/journal/30](http://www.springer.com/birkhauser/mathematics/journal/30)
- 30 Journal of Evolution Equations
Website [http //link. springer. com/journal/28](http://link.springer.com/journal/28)
- 31 Bulletin of Mathematical Sciences
Website [http //www. springer. com/birkhauser/mathematics/journal/13373](http://www.springer.com/birkhauser/mathematics/journal/13373)
- 32 Discrete & Continuous Dynamical Systems – Series A DCDS – A
Website [http //www. aims sciences. org/journals/home. jsp journalID = 1](http://www.aims sciences. org/journals/home. jsp journalID = 1)
- 33 Communications on Pure and Applied Analysis CPAA
Website [https //www. aims sciences. org/journals/contentsListnew. jsp pubID = 463](https://www.aims sciences. org/journals/contentsListnew. jsp pubID = 463)
- 34 Transactions of the American Mathematical Society
Website [http //www. ams. org/publications/journals/journalsframework/tran](http://www.ams.org/publications/journals/journalsframework/tran)
- 35 Proceedings of the American Mathematical Society
Website [http //www. ams. org/publications/journals/journalsframework/proc](http://www.ams.org/publications/journals/journalsframework/proc)
- 36 Communications in Partial Differential Equations
Website [http //www. scimagojr. com/journalsearch. php q = 25812&tip = sid](http://www.scimagojr.com/journalsearch.php?q=25812&tip=sid)
- 37 Nonlinearity
Website [http //iopscience. iop. org/0951 – 7715](http://iopscience.iop.org/0951-7715)
- 38 Communications on Pure and Applied Mathematics
Website [http //onlinelibrary. wiley. com/journal/10. 1002/ ISSN 1097 – 0312](http://onlinelibrary.wiley.com/journal/10.1002/ISSN1097-0312)
- 39 Bulletin of the London Mathematical Society
Website [http //www. lms. ac. uk/publications/blms](http://www.lms.ac.uk/publications/blms)
- 40 Proceedings of the Royal Society of Edinburgh Section A Mathematics
Website [http //www. ingentaconnect. com/content/rse/proca](http://www.ingentaconnect.com/content/rse/proca)

电力系统及其自动化(080802)

(Power System and Its Automation)

学科门类:工学(08) 一级学科:电气工程(0808)

一、学科简介

		1987	2003	
	973	863		
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二、培养目标

三、主要研究方向

1. Power System Operation and Control
2. Automation of Distribution Power Systems
3. Fault Diagnosis and Information Processing
for Electrical Equipments
4. Novel AC/DC Electrical Drive System
5. Renewable Energy Conversion System

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2					
	66D0001	Marxism in Contemporary China	36	2			/		
	88D0001	Applied Functional Analysis	48	3					
	88D0002	Modern Methods in Partial Differential Equations	32	2					
	88D0003	Stochastic Differential Equations	32	2					
	88D0004	Multivariate Statistics Analysis	32	2					2 – 4
	88D0005	Reliability Analysis	32	2					
	88D0006	Artificial Neural Networks	32	2					
	88D0007	Dynamical Systems Chaos and Fractals	48	3					
	06D0101	Special Topics on Power System and Its Automation	16	1		/	/		
	06D0102	Theory and Method of Power System Modeling	32	2		/	/		
	06D0103	Intelligent Control and System	32	2		/	/		2
	06D0104	Power System Nonlinear Analysis and Control	32	2		/	/		
			Second Foreign Language	48	2				

66D0002

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2003.
- 2 . M . 2004.
- 3 . M . 2007.
- 4 . M . 2002.
- 5

信息与通信工程(0810)

(Information and Communication Engineering)

学科门类:工学(08)

一级学科:信息与通信工程(0810)

一、学科简介

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二、培养目标

三、主要研究方向

1. Signal and Information Processing
2. Communication and Information System
3. Telemetry and Information Network
4. Microwave Technology and Its application
5. Internet of things and its Application

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0007	Dynamics System & Chaos	48	3						
	88D0004	Multivariate Statistical Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	07D0201	Special Topic on Information and Communication Engineering	16	1		/	/			
	07D0202	Modern Signal Processing	32	2		/	/			2
	07D0203	Modern Communication Technology	32	2		/	/			
	07D0204	Multi – source Information Fusion	32	2		/	/			
		Second Foreign Language	48	2						
4	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
	07D0110	Scientific Paper Writing & Publishing	16	1		/	/			
	07D0205	Microwave Remote Sensors classics	16	1			/			
	07D0206	Stochastic Optimization and Network Information Theory	16	1		/	/			
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 2012.
- 2 MATLAB .
- 3 2001.
- 4 1986.
- 5 2000.
- 6 A. V. 2001.
- 7 2012.
- 8 2004.
- 9 Thomas M. Cover Joy A. Thomas 2 2008.
- 10 Robert M. Gray 2012.
- 11 D. P. Bertsekas. 2011.
- 12 Sergios Theodoridis Konstantions Koutroumbas 4 2010.
- 13 Milan Sonka Vaclav Hlavac Roger Boyle 3 2011.
- 14 Fitts J. M. Aiding tracking as applied to high accuracy pointing systems. IEEE Transactions on Aerospace and Electronic Systems. 1973 9 3 350 – 368.
- 15 Kirubarajan T. Bar – Shalom Y. Pattipati K. R. Ground target tracking with topography – based variable structure IMM estimator. IEEE Transactions on Aerospace and Electronic Systems. 2000 36 1 26 – 46.
- 16 M. P. tzold. Mobile Fading Channels. John Wiley & Sons Ltd. 2002
- 17 T. K. Moon. Error Correction Coding – Mathematical Methods and Algorithms. John Wiley & Sons Ltd 2005.
- 18 B. Vucetic and Jinhong Yuan. Space – time Coding. John Wiley & Sons Ltd 2003.
- 19 A. M. Kondoz Digital Speech – coding for low bit rate communication systems Wiley 2004.
- 20 Rabiner Lawrence R. Juang Biing – Hwang Fundamentals of Speech Recognition Prentice – Hall 1993.
- 21 Bishop Christopher M. Pattern Recognition and Machine Learning Springer – Verlag New York Inc. 2006.
- 22 Kenneth R. Digital Image Processing Castleman Pearson Education US 1995.
- 23 Practicalities Davies Computer And Machine Vision Theory Algorithms E. R. Academic Press 2012.
- 24 IEEE Transactions on Wireless Communication.
- 25 IEEE Transactions on Pattern Analysis and Machine Intelligence.
- 26 IEEE Transactions on Signal Processing.
- 27 IEEE Transactions on Communications.
- 28 IEEE Transactions on Networking.
- 29 IEEE Transactions on Neural Networks and Learning Systems Neural Networks.
- 30 IEEE Transactions on Image Processing.

计算机科学与技术(0812)

(Computer Science and Technology)

学科门类:工学(08) 一级学科:计算机科学与技术(0812)

一、学科简介

1978

五、学分要求和课程设置

	13 - 15	9 - 11
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2							
	66D0001	Marxism in Contemporary China	36	2				/			
	88D0004	Multivariate Statistics Analysis	32	2						2 – 4	
	88D0005	Reliability Analysis	32	2							
	88D0006	Artificial Neural Networks	32	2							
	07D0103	Advanced Logic	32	2			/	/			
	07D0106	Computability & Computational Complexity	32	2			/	/			
	07D0109	Formal Semantics	32	2			/	/			
	07D0104	Special Topic on Computer Science and Technology	16	1			/	/		2	
	07D0108	Novel Software Architecture	32	2			/	/			
	07D0102	Distributed Computing & Systems	32	2			/	/			
	07D0101	Web Knowledge Representation on the Web	32	2			/	/			
	07D0105	Visualization in Scientific Computing	32	2			/	/			
	4		Second Foreign Language	48	2						
		66D0002	Intensive Readings of Original Works of Marxism	18	1				/		2
07D0110		Scientific Paper Writing & Publishing	16	1			/	/			
07D0111		Digital Media Technology	16	1			/	/			
07D0112		Data Management & Analysis Technologies	16	1			/	/			
			32	2			/	/			
	99D0103										
	99D0101										
	99D0102										

本学科推荐阅读的重要书目、专著和学术期刊

- 1 Thomas H. Cormen Charles E. Leiserson Ronald L. Rivest Clifford Stein
3 ISBN 9787111407010
- 2 2 ISBN
9787111326311
- 3 Hopcroft J. E 3
ISBN 9787111240358
- 4 7 ISBN
9787111335818
- 5 ISBN
9787111075752
- 6 3 ISBN
9787111255444
- 7 8 IS-
BN 9787111328780
- 8 6 ISBN
9787111375296
- 9 Mitchell T. M. ISBN 9787111109938
- 10 3 ISBN
9787302252955
- 11 ACM Transactions on Computer Systems ACM [http //tocs. acm. org/](http://tocs.acm.org/)
- 12 IEEE Transactions on Computers IEEE [http //www. computer. org/portal/web/tc](http://www.computer.org/portal/web/tc)
- 13 ACM Transactions on Architecture and Code Optimization ACM [http //taco. acm. org/](http://taco.acm.org/)
- 14 ACM Transactions on Embedded Computing Systems ACM [http //acmtecs. acm. org](http://acmtecs.acm.org)
- 15 Parallel Computing Elsevier [http //www. journals. elsevier. com/parallel – computing](http://www.journals.elsevier.com/parallel-computing)
- 16 IEEE/ACM Transactions on Networking IEEE ACM [http //www. comsoc. org/net/](http://www.comsoc.org/net/)
- 17 ACM Transactions on Internet Technology ACM [http //toit. acm. org/](http://toit.acm.org/)
- 18 ACM Transactions on Multimedia Computing Communications and Applications ACM [http //tomccap. acm. org/](http://tomccap.acm.org/)
- 19 Journal of Cryptology Springer [http //www. iacr. org/jofc/jofc. html](http://www.iacr.org/jofc/jofc.html)
- 20 ACM Transactions on Information and System Security ACM [http //tissec. acm. org/](http://tissec.acm.org/)
- 21 ACM Transactions on Software Engineering Methodology ACM [http //www. acm. org/pubs/tosem/](http://www.acm.org/pubs/tosem/)
- 22 IEEE Transactions on Software Engineering IEEE [http //www. computer. org/portal/web/tse/home](http://www.computer.org/portal/web/tse/home)
- 23 ACM Transactions on Database Systems ACM [http //www. acm. org/tods/](http://www.acm.org/tods/)
- 24 IEEE Transactions on Knowledge and Data Engineering IEEE Computer Society [http //www. computer. org/ tkde/](http://www.computer.org/tkde/)
- 25 ACM Transactions on Graphics ACM [http //www. acm. org/tog](http://www.acm.org/tog)
- 26 IEEE Transactions on Image Processing IEEE
[http //www. signalprocessingsociety. org/publications/periodicals/image – processing](http://www.signalprocessingsociety.org/publications/periodicals/image-processing)
- 27 Artificial Intelligence Elsevier [http //www. journals. elsevier. com/artificial – intelligence/](http://www.journals.elsevier.com/artificial-intelligence/)
- 28 IEEE Trans on Pattern Analysis and Machine Intelligence IEEE [http //www. computer. org/portal/web/tpa- mi/home](http://www.computer.org/portal/web/tpami/home)

4. Rock Mechanics and Rock Mass Engineering

5. Seepage Theory and Testing for Geomaterial

四、学制和学习年限

	4	6	6
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五、学分要求和课程设置

	13 - 15	9 - 11
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0002	Modern Methods in Partial Differential Equations	32	2						2 – 4
	88D0003	Random Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0004		32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	04D0101	Special Topics on Geotechnical Engineering	16	1		/	/			
	04D0102	Modern Geomechanics	32	2		/	/			2
	04D0103	Unsaturated Soil Mechanics	32	2		/	/			
04D0104	Modern Technology in Geotechnical Engineering	32	2		/	/				
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
			32	2		/	/			
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2007.
- 2 . M . 2002.
- 3 . M . 1995.
- 4 . M . 2006.
- 5 . M . 1992.
- 6 . M . 2005.
- 7 . M . 2004.
- 8 . M . 1990.
- 9 . M . 1998.
- 10 GB/T50123 – 1999 . 1999.
- 11 R. F. Craig. Craig' s Soil Mechanics M . Spon Press Taylor & Francis Group 7th edition 2004
- 12 David Muir Wood. Soil Behaviour and Critical State Soil Mechanics M . Cambridge University Press 1990
- 13 James K. Mitchell. Fundamentals of Soil Behavior M . Wiley 2nd edition 1993
- 14 Braja M. Das. Advanced Soil Mechanics M . Taylor & Francis 3rd edition 2008
- 15 Braja M. Das. Fundamentals of Geotechnical Engineering M . Brooks/Cole 2000
- 16 J. C. Santamarina Katherine A. Klein Moheb A. Fam. Soils and Waves Particulate Materials Behavior Characterization and Process Monitoring M . John Wiley & Sons Ltd 2001
- 17 D. G. Fredlund H. Rahardjo. Soil Mechanics for Unsaturated Soils M . John Wiley & Sons 1993.
- 18 Charles W. W. Ng Bruce Menzies. Advanced Unsaturated Soil Mechanics and Engineering M .
- 19 David M. Potts Lidija Zdravkovi . Finite Element Analysis in Geotechnical Engineering Theory and Application M . Taylor & Francis 2007.
- 20 Donald P. Coduto. Foundation Design Principles and Practices M . Prentice Hall 2nd edition 2000.
- 21 . M . 2000.
- 22 . M . 2004.
- 23 . M . 2011.
- 24 . M . 2005.
- 25 . M . 2010.
- 26 . M . 2011.
- 27 J .
- 28 J .
- 29 J .
- 30 J .
- 31 J .
- 32 J .
- 33 J .
- 34 J .
- 35 J .
- 36 J .
- 37 Geotechnique ISSN 0016 – 8505 J .
- 38 Journal of geotechnical and geoenvironmental engineering ISSN 1090 – 0241 J .
- 39 Canadian geotechnical journal ISSN 0008 – 3674 J .
- 40 Soils and foundations ISSN 0038 – 0806 J .
- 41 Geotechnical Testing Journal ISSN 0149 – 6115 J .
- 42 European Journal of Environmental and Civil Engineering ISSN 1964 – 8189 J .
- 43 Computers and Geotechnics ISSN 0266 – 352X J .

- 44 Journal of Geotechnical Engineering ISSN 0733 – 9410 J .
- 45 International Journal of Rock Mechanics and Mining Sciences ISSN 1365 – 1609 J .
- 46 International Journal for Numerical and Analytical Methods in Geomechanics ISSN 1096 – 9853 J .
- 47 Ocean Engineering ISSN 0029 – 8018 J .
- 48 Journal of Earthquake Engineering ISSN 1363 – 2469 J .
- 49 Marine Georesources & Geotechnology ISSN 1064 – 119X J .
- 50 Geophysical Journal International ISSN 1365 – 246X J .
- 51 Applied Ocean Research ISSN 0141 – 1187 J .
- 52 Earthquake Spectra ISSN 8755 – 2930 J .
- 53 Soil Dynamic and Earthquake Engineering ISSN 0267 – 7261 J .
- 54 Earthquake Engineering and Engineering Vibration ISSN 1671 – 3664 J .
- 55 Bulletin of the Seismological Society of America ISSN 0037 – 1106 J .
- 56 Probabilistic Engineering Mechanics ISSN 0266 – 8920 J .
- 57 China Ocean Engineering ISSN 0890 – 5487 J .
- 58 Applied Mathematics and Mechanics ISSN 0021 – 8928 J .
- 59 Journal of Zhejiang University – SCIENCE A ISSN 1673 – 565X J .

结构工程 (081402)

(Structural Engineering)

学科门类:工学(08) 一级学科:土木工程(0814)

一、学科简介

1986

5. The Aseismic Analysis and Vibration Control of Engineering Structures

四、学制和学习年限

	4	6	6
2			5 - 6
7			

五、学分要求和课程设置

	13 - 15	9 - 11
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	1	2
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六、教学环节

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9 – 11	00D0001	First Foreign Language	48	2							
	66D0001	Marxism in Contemporary China	36	2			/				
	88D0001	Applied Functional Analysis	48	3						2 – 4	
	88D0003	Random Differential Equations	32	2							
	88D0002	Modern Methods in Partial Differential Equations	32	2							
	88D0005	Reliability Analysis	32	2							
	88D0006	Artificial Neural Networks	32	2							
	88D0007	Dynamical Systems Chaos and Fractals	48	3							
	04D0201	Special Topic on Structural Engineering	16	1		/	/			2	
	04D0202	Advanced Reinforced Concrete Structures	32	2		/	/				
	04D0203	Advanced Steel Structures	32	2		/	/				
	10D0102	Advanced Structural Experimental Mechanics & Testing Technique	32	2		/	/				
	10D0103	Constitutive Theory of Engineering Materials	32	2		/	/				
	4		Second Foreign Language	48	2						2
		66D0002	Intensive Readings of Original Works of Marxism	18	1			/			
			32	2		/	/				
	99D0103										
	99D0101										
	99D0102										

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2005.
- 2 . M . 1989.
- 3 . M . 2007.
- 4 . M . 1997.
- 5 . M . 1999.
- 6 . - M . 2009.
- 7 . M . 2012.
- 8 . 2 M . 2007.
- 9 . M . 2006.
- 10 . M . 2012.
- 11 . M . 2009.
- 12 . M . 2009.
- 13 . M . 2012.
- 14 . M . 2007.
- 15 . M . 2011.
- 16 . M . 2010.
- 17 ? . M . 2011.
- 18 . M . 2008.
- 19 Bungale S. Taranath. Reinforced Concrete Design of Tall Buildings M . CRC Press 2009.
- 20 Bungale S. Taranath. Structural Analysis and Design of Tall Buildings Steel and Composite Construction M . CRC Press 2011.
- 21 Hassan Al Nageim T. J. MacGinley. Steel Structures Practical Design Studies Third Edition M . CRC Press 2010.
- 22 Mohamed Abdallah El – Reedy. Reinforced Concrete Structural Reliability M . CRC Press 2012.
- 23 W. F. Chen E. M. Lui. Earthquake Engineering for Structural Design M . CRC Press 2005.
- 24 J .
- 25 J .
- 26 J .
- 27 J .
- 28 J .
- 29 J .
- 30 J .
- 31 J .
- 32 J .
- 33 J .
- 34 J .
- 35 J .
- 36 J .
- 37 J .
- 38 J .
- 39 Materials and Structures ISSN 1359 – 5997 J .
- 40 Journal of Steel & Composite Structures ISSN 1229 – 9367 J .
- 41 Structural Engineering and Mechanics ISSN 1225 – 4568 J .
- 42 ACI Materials Journal ISSN 0889 – 325X J .
- 43 ACI Structural Journal ISSN 0889 – 3241 J .

- 44 Journal of Earthquake Engineering ISSN 1363 – 2469 J .
- 45 Journal of Engineering Mechanics ISSN 0733 – 9399 J .
- 46 Journal of Structural Engineering ISSN 0733 – 9445 J .
- 47 Advances in Structural Engineering ISSN 1369 – 4332 J .
- 48 Construction and Building Materials ISSN 0950 – 0618 J .
- 49 Earthquake Engineering and Structural Dynamics ISSN 0098 – 8847 J .
- 50 Journal of Constructional Steel Research ISSN 0143 – 974X J .
- 51 Journal of Earthquake Engineering ISSN 1363 – 2469 J .
- 52 The Magazine of Concrete Research ISSN 0024 – 9831 J .
- 53 Engineering Structures ISSN 0141 – 0296 J .

市政工程 (081403)

(Urban Construction)

学科门类:工学(08) 一级学科:土木工程(0814)

一、学科简介

2003

863

二、培养目标

三、主要研究方向

1. Theory and Technology for Drinking Water Safety
2. Optimization Theory and Technology for Urban Water System
3. Theory and Technology for Wastewater Treatment and Utilization
4. Municipal and Industrial Water Saving Technology

四、学制和学习年限

4	6	6
2	5 - 6	
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五、学分要求和课程设置

13 - 15	9 - 11
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2							
	66D0001	Marxism in Contemporary China	36	2			/				
	05D0202	Bio – chemical Engineering	32	2			/				
	05D0203	Advanced Organic Analysis	32	2			/				
	05D0204	Chemical Kinetics and Reactor Theory	32	2			/				
	05D0205	Ecological Construction and Management	32	2			/			2 – 4	
	05D0208	Groundwater and Medium Pollution Control	32	2			/				
	05D0209	Environment and Ecological Hydraulics	32	2			/				
	05D0201	Special Topic on Urban Construction	16	1		/	/				
	05D0107	Modern Detecting Technology	32	2			/				
	05D0206	Modern Water and Wastewater Treatment	32	2		/	/			2 – 4	
	05D0207	Theory and Technology of Water Pollution Control	32	2		/	/				
	4		Second Foreign Language	48	2						
		66D0002	Selected Readings in Marxist classics	18	1			/			
			32	2						2	
			32	2							
	99D0103										
	99D0101										
	99D0102										

本学科推荐阅读的重要书目、专著和学术期刊

- 1 Environmental Science and Technology J
- 2 Water Research J
- 3 Water Science and Technology J
- 4 Desalination J
- 5 Separation and Purification Technology J
- 6 Journal of Hazardous Material J
- 7 Journal of Water Supply Research and Technology – AQUA J
- 8 Journal of Water and Health J
- 9 J
- 10 J
- 11 J
- 12 J
- 13 J
- 14 J
- 15 J
- 16 2000
- 17 2000
- 18 2003
- 19 2012
- 20 2008
- 21 Mogens Henze 2011

防灾减灾工程及防护工程(081405)

(Disaster Prevention Mitigation and Protection Engineering)

学科门类:工学(

7

五、学分要求和课程设置

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六、教学环节

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七、论文工作

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本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2007.
- 2 . M . 2003.
- 3 . M . . 2006.
- 4 Skinner R I Robinson W H . M . 1996.
- 5 . M . 2006.
- 6 . M . 2002.
- 7 . M . 2000.
- 8 Hudson J A et al. Comprehensive Rock Engineering Principles Practice and Projects M . Oxford Pergamon Press 1993.
- 9 . M . 2011.
- 10 Persson P Holmberg R Lee J. Rock Blasting and Explosives Engineering M . CRC Press 1993.
- 11 . M . 1989.
- 12 . M . 2007.
- 13 . M . 2002.
- 14 . M . 1995.
- 15 Krauthammer T. Modern Protective Structures M . CRC Press Taylor & Francis Group 2008.
- 16 Mays G C Smith P D. Blast Effects on Buildings M . Telford London 1995.
- 17 Smith P D Hetherington J D. Blast and Ballistic Loading of Structures M . Butterworth – Heinemann Ltd 1994.
- 18 Biggs J M. Introduction to Structural Dynamics M . New York McGraw – Hill 1964.
- 19 J .
- 20 J .
- 21 J .
- 22 J .
- 23 J .
- 24 J .
- 25 J .
- 26 J .
- 27 J

- 44 ACI Structural Journal J .
- 45 Magazine of Concrete Research J .
- 46 Journal of Composites for Construction J .
- 47 Shock Waves J .

桥梁与隧道工程 (081406)

(Bridge and Tunnel Engineering)

学科门类:工学(08) 一级学科:土木工程(0814)

一、学科简介

2003

2004

MTS

Bridge

5.

Water Disaster Prevention and Control of

Tunnel Engineering

6.

Design and Construction of Shield Tunnel

7.

Optimization Study of Tunnel Supporting Sys-

tem

8.

Numerical Simulation of Underground

Engineering and Risk Assessment of Subway Engineering

四、学制和学习年限

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五、学分要求和课程设置

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Random Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						2 – 4
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	04D0403	Special Topic on Bridge and Tunnel Engineering	16	1		/	/			
	04D0404	Cable – supported Bridge	32	2		/	/			
	04D0405	Bridge Vibration and Stability Analysis	32	2		/	/			2
	04D0104	Modern Technology in Geotechnical Engineering	32	2		/	/			
		Second Foreign Language	48	2						
	4	66D0002	Intensive Readings of Original Works of Marxism	18	1			/		
10D0102		Advanced Structural Experimental Mechanics & Testing Technique	32	2						
04D0406		Bridge Seismic and Damage Control	32	2		/	/			
04D0407		Composite and Novel Prestressed Concrete Bridge	32	2		/	/			2
04D0408		Back Analysis of Underground Engineering	32	2		/	/			
			32	2						
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 1997.
- 2 . M . 1997.
- 3 . M . 2005.
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- 17 . M . 2007.
- 18 . — M . 2006.
- 19 . M . 2005.
- 20 . — M . 2005.
- 21 . M . 2005.
- 22 . M . 2000.
- 23 . M . 2011.
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- 26 . M . 2003.
- 27 . M . 2001.
- 28 . M . 2010.
- 29 . . . M . 2008.
- 30 . M . 2012.
- 31 J .
- 32 J .
- 33 J .
- 34 J .
- 35 J .
- 36 J .
- 37 J .
- 38 J .
- 39 Rock Mechanics and Rock Engineering J .
- 40 Journal of Bridge Engineering J .
- 41 Journal of Constructional Steel Research J .
- 42 Journal of Structural Engineering J .
- 43 Engineering Structures J .
- 44 Computer – aided civil and infrastructure engineering J .
- 45 Journal of earthquake engineering and structural dynamic J .

土木工程建造与管理(0814Z1)

(Construction and Management of Civil Engineering)

学科门类:工学(08) 一级学科:土木工程(0814)

一、学科简介

2003

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二、培养目标

三、主要研究方向

1. Construction Technology of Civil Engineering
2. Safety and Risk Management of Civil Engineering Construction
3. Quality Control of Project Life Cycle
4. Sustainable Construction for Project
5. Investment of Construction Project

四、学制和学习年限

	4	6	6
2			5-6
7			

五、学分要求和课程设置

	13-15	9-11
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	1	2
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六、教学环节

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0002	Modern Methods in Partial Differential Equations	32	2						2 – 4
	88D0003	Random Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	13D0102	Management System Engineering	32	2						
	04D0501	Special Topic on Construction and Management of Civil Engineering	16	1		/	/			
	04D0502	New Construction Technology of Civil Engineering	32	2		/	/			2
	13D0107	Theory and Method of Project Management	32	2		/	/			
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . 1 M . 2007.
- 2 . M . 2012.
- 3 . M . 2012.
- 4 . M . 2010.
- 5 . M . 2007.
- 6 Frederick E. Gould Nancy Joyce. Construction Project Management M . Prentice Hall 2003.
- 7 . M . 2007.
- 8 . M . 2003.
- 9 . M . 2007.
- 10 . M . 2006.
- 11 . M . 2004.
- 12 . M . 2004.
- 13 赞. M . 2008.
- 14 . M . 2007.
- 15 . M . 2001.
- 16 Desheng Dash Wu. Modeling Risk Management in Sustainable Construction M . Springer – Verlag Berlin and Heidelberg GmbH & Co. K 2011.
- 17 . M . 1 2011.
- 18 . M . 2008.
- 19 . M . 2012.
- 20 . M . 2011.
- 21 . M . 2012.
- 22 Sandy Halliday. Sustainable Construction M . Routledge 2012.
- 23 Paola Sassi. Strategies for Sustainable Architecture M . Taylor & Francis 2006.
- 24 . M . 2010.
- 25 . M . 2010.
- 26 Journal of Construction Engineering and Management ISSN 0733 –9364
- 27 Automation in Construction ISSN 0926 –5805 J .
- 28 Reliability Engineering & System Safety ISSN 0951 –8320 J .
- 29 Geotechnical Testing Journal ISSN 0149 –6115 J .
- 30 Structure and Infrastructure Engineering ISSN 1573 –2479 J .
- 31 Journal of Bridge Engineering ISSN 1084 –0702 J .
- 32 Journal of Structural Engineering ISSN 0733 –9445 J .
- 33 Journal of Constructional Steel Research ISSN 0143 –974X J .
- 34 Tunnelling and Underground Space Technology ISSN 0886 –7798 J .
- 35 J .
- 36 J .
- 37 J .
- 38 J .
- 39 J .
- 40 J .
- 41 J .
- 42 J .
- 43 J .
- 44 J .
- 45 J .

土木工程材料(0814Z2)

(Civil Engineering Materials)

学科门类:工学(08) 一级学科:土木工程(0814)

一、学科简介

2003

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二、培养目标

三、主要研究方向

1. Concrete Materials
2. Composite Materials
3. New Construction Materials
4. Structural Metal Materials

5.

Geotechnical Synthetic Materials

四、学制和学习年限

	4	6	6
2			5 - 6
7			

五、学分要求和课程设置

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0003	Random Differential Equations	32	2						
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	10D0201	Special Topic on Civil Engineering Materials	16	1		/	/			2
	10D0202	Plastic Deformation and Fracture	32	2		/	/			
	10D0203	Modern Concrete Technology	32	2		/	/			
	1010D05	New Composite Materials	32	2		/	/			
4		Second Foreign Language	48	2						
	66D0002	Selected Readings in Marxist Classics	18	1			/			2
	10D0204	Surface and Interface of Materials	32	2		/	/			
			32	2		/	/			
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2010.
- 2 . M . 2010.
- 3 . M . 2008.
- 4 . M . 2006.
- 5 . M . 2004.
- 6 Julian Eastoe. M . 2005.
- 7 . M . 2006.
- 8 . M . 2007.
- 9 Suresh S. Fatigue of

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49 J

水文学及水资源 (081501)

(Hydrology and Water Resources)

学科门类:工学(08)

一级学科:水利工程(0815)

一、学科简介

		1952			
1981			1988	2002	2007
	" 211	" "			" 985
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二、培养目标

三、主要研究方向

1. Watershed Hydrological Simulation and Forecasting
2. Theory of Hydrological Uncertainty and Application
3. Water Resources System and Sustainable Utilization
4. Groundwater System Theory and Control

5. Theory and Techniques of Hydroinformatics

6. Ecohydrology and Environmental Hydrology

四、学制和学习年限

	4	6	6
2			5 - 6
7			

五、学分要求和课程设置

	13 - 15	9 - 11
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六、教学环节

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七、论文工作

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本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 1988.
- 2 . M . 2007.
- 3 . M . 2002.
- 4 . M . 2007.
- 5 . M . M 2010.
- 6 . - M

- 37 PAUL J W DAVID M H JONATHAN P S. Hydroecology and ecohydrology past present and future M .
Chichester England Hoboken NJ Wiley 2007.
- 38 SENE K. Hydrometeorology forecasting and applications M . Springer 2010.
- 39 RAKHECHA P R Singh V P. Applied hydrometeorology M

水力学及河流动力学(081502)

(Hydraulics and River Dynamics)

学科门类:工学(08) 一级学科:水利工程(0815)

一、学科简介

1981

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二、培养目标

三、主要研究方向

1. River Management Aquatic Ecology and Environment

2. Theory and Applications of Engineering Hydraulics

3. Flow Sediment Transportation and Its Applica-

tions in River Engineering

4. Engineering Seepage and Groundwater Environment

5.

Computational Hydraulics and Hydroinformatics

四、学制和学习年限

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2					
	66D0001	Marxism in Contemporary China	36	2			/		
	88D0001	Applied Functional Analysis	48	3					2 – 5
	88D0004	Multivariate Statistics Analysis	32	2					
	88D0005	Reliability Analysis	32	2					
	88D0007	Dynamical Systems Chaos and Fractals	48	3					
	02D0101	Special Topic on Hydraulics and Fluvial Dynamics	16	1		/			
	02D0102	Research Progress of Engineering Hydrodynamics	32	2		/	/		2
	02D0103	Advanced Sedimentation and Application	32	2		/	/		
	02D0104	Fluid flow and Coupled Thermo – hydro – mechanical – chemical THMC Processes in Fractured Porous Media	32	2		/	/		
		Second Foreign Language	48	2					
4	66D0002	Intensive Readings of Original Works of Marxism	18	1			/		2
			32	2		/	/		
	99D0103								
	99D0101								
	99D0102								

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 1982.
- 2 . M . 2007.
- 3 . M . 2005.
- 4 . M . 1984.
- 5 . M . 2009.
- 6 . M . - 1959.
- 7 . M . 2011.
- 8 . M . 1991.
- 9 . The Basics with Applications M . 2010.
- 10 . N - S M . 1989.
- 11 . M . 1999.
- 12 . M . 2006.
- 13 . M . 2005.
- 14 . M . 1983.
- 15 . M . 2003.
- 16 . M . 2006.
- 17 . M . 1990.
- 18 . M . 1994.
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51	Journal of Hydraulic Engineering
52	Irrigation and Drainage
53	Natural Hazards
54	Journal of Hydrology
55	Engineering Application of Computational Fluid Mechanics
56	Journal of Hydrodynamics
57	China Environmental Science
58	Earth – Science Reviews
59	Environmental Fluid Mechanics
60	International Journal of Rock Mechanics and Mining Sciences
61	Journal of the Environmental Engineering
62	Ground Water
63	Environmental Science and Technology
64	Water Resources Research
65	Journal of Hydraulic Research
66	Canada Journal of Civil Engineering

水工结构工程 (081503)

(Hydraulic Structure Engineering)

学科门类:工学(08) 一级学科:水利工程(0815)

一、学科简介

	1952	1981	1990
	1996	1997	" 211
"	1999		2001
			2003
973			

二、培养目标

三、主要研究方向

1. Safety Monitoring Theories Methods and Techniques for High Dams and Their Foundations
2. Computation Theories and Experimental Techniques for Dam Designs
3. High Slopes and Underground Engineering
4. Sluices Ship Locks and Water Transport Structures
5. Materials and Construction for Hydraulic Concrete Structures

四、学制和学习年限

	4	6	6
2			5 - 6
7			

五、学分要求和课程设置

	13 - 15	9 - 11
4		
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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 5
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Stochastic Differential Equations	32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	02D0201	Special Topic on Hydraulic Structure	16	1		/				
	02D0202	Safety Monitoring Theory and Its Application for Hydraulic Structures	32	2		/	/			2
	02D0203	Dynamics Analysis and Model Experimental of Hydraulic Structures	32	2		/	/			
	02D0204	The Theory and Application of Structure Optimization Design	32	2		/	/			
02D0205	The Discrete Element Method and Mechanics of Granular Materials	32	2		/	/				
02D0403	Safety Management of Water Conservancy Project	32	2		/	/				
		Second Foreign Language	48	2						
4	66D0002	Intensive Readings of Original Works of Marxism	18	1			/		2	
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2003.
- 2 . M . 2006.
- 3 . M . 2009.
- 4 . M . 1997.
- 5 M . 2000.
- 6 . M . 2004.
- 7 . M . 1997.
- 8 . M . 2003.
- 9 . 50 M . 2000.
- 10 . M . 2000.
- 11 . M . 2007.
- 12 . M . 1984.
- 13 . M . 2004.
- 14 . 3 M . 2009.
- 15 . M . 2009.
- 16 M .
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- 17 . M . 2010.
- 18 . M . 2012.
- 19 . M . 2004.
- 20 . M . 2006.
- 21 . M . 2003.
- 22 . M .
2008.
- 23 . Dike Engineering M . M 2004.
- 24 Pilarczyk K W. Geosynthetics and Geosystems in Hydraulic and Coastal Engineering M . Taylor & Francis
2000.
- 25 Marino M A Luthin J N. Seepage and Groundwater M . Access Online via Elsevier 1982

43	International Journal for Numerical and Analytical Methods in Geomechanics
44	Computers and Geotechnics
45	Journal of Geotechnical and Geoenvironmental Engineering
46	Geotechnical Testing Journal
47	Geotechnique
48	Structural Health Monitoring
49	Journal of Advanced Concrete Technology
50	Cement and Concrete Research

水利水电工程 (081504)

(Water Conservancy and Hydropower Engineering)

学科门类:工学(08) 一级学科:水利工程(0815)

一、学科简介

		1952	1984		
1993		1996		2007	
	" 211 "	"			
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二、培养目标

三、主要研究方向

1. Water Resources and Hydropower System Planning and Development Strategy

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| 2. | / | Hydraulics/Structure of Hydropower Station and Pump Station |
| 3. | | Hydraulic Transient and Safety Control of Hydraulic Unit |
| 4. | | Technique of Pumped – storage Project and Renewable Energy |
| 5. | | Agricultural Water Conservancy and Water – saving Irrigation |

四、学制和学习年限

	4	6	6
2			5 – 6
7			

五、学分要求和课程设置

	13 – 15	9 – 11
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	1	2
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Stochastic Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	02D0301	Special Topic on Water Conservancy and Hydropower Engineering	16	1			/			
	02D0302	Fluid Transients II	32	2			/	/		2
	02D0303	New Theory of Water Conservancy and Hydropower System Planning and Operation	32	2			/	/		
	02D0304	Detection and Fault Diagnosis of Hydroelectric Units	32	2			/	/		
02D0502	Modern Theory of Irrigation and Drainage	32	2			/	/			
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
			32	2			/	/		
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 M. H. . M . 1985.
- 2 . M . 1987.
- 3 . M . 1995.
- 4 . M . 2000.
- 5 . M . 2000.
- 6 . M . 1993.
- 7 . M . 1988.
- 8 . M . 2005.
- 9 . M . 2004.
- 10 . M . 2011.
- 11 . M . 2010.
- 12 . M . 2009.
- 13 . M . 2008.
- 14 . M . 2012.
- 15 C. Jaeger. M . 1987.
- 16 . M . 2009.
- 17 . M . 2003.
- 18 . M . 2010.
- 19 . M . 2013.
- 20 Ogata K . M . 2011.
- 21 Wylie E B Streeter V L Suo L. Fluid Transients in Systems M . NJ Prentice Hall Englewood Cliffs 1993.
- 22 Kundur P. Power System Stability and Control. M . Beijing McGraw – Hill Education Asia Co. and China Electric Power Press 2001.
- 23 Larock B E Jeppson R W Watters G Z. Hydraulics of Pipeline Systems M . CRC Press 2010.
- 24 Duan C G Karelin. V. Y. Abrasive Erosion and Corrosion of Hydraulic Machinery M . London Imperial College Press 2002.
- 25 Journal of Hydraulic Research
- 26 Journal of Hydraulic Engineering
- 27 Journal of Fluids Engineering
- 28 Canadian Journal of Civil Engineering
- 29 Journal of Hydrodynamics
- 30 Advances in Water Resources
- 31 Water Science and Technology
- 32 Water Resources Management European Water Resources Association
- 33 Proceedings of the ASME Fluids Engineering Division Summer Conference
- 34 Proceedings of the IAHR Conference
- 35 Water Resources Research
- 36 Hydrology Process
- 37
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港口、海岸及近海工程 (081505)

(Harbor, Coastal and Offshore Engineering)

学科门类:工学(08) 一级学科:水利工程(0815)

一、学科简介

		1952	1981	
	1988			1990
		2007		
	" 211	" "		" 985
		2009	2012	
		"	"	"
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二、培养目标

三、主要研究方向

1. Hydrodynamics of Estuary Coastal and Off - shore Engineering
2. Coastal Storm Disaster and Its Mitigation
3. Sedimentation in Harbor Navigation Engineering and Dredging
4. Engineering Structure and Its Inter - action with Surrounding Medium
5. Economy Planning and Management of Water-

四、学制和学习年限

	4	6	6
2			5 - 6
7			

五、学分要求和课程设置

	13 - 15	9 - 11
4		
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	03D0101	Special Topic	16	1	/	/	/			2
	03D0102	Advanced Coastal Dynamics	32	2		/	/			
	03D0103	Advanced Theory and Method of Structure Analysis +	32	2		/	/			
	4		Second Foreign Language	48	2					
66D0002		Intensive Readings of Original Works of Marxism	18	1		/	/			
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2002.
- 2 . M . 2009.
- 3 . M . 1985.
- 4 . M . 1983.
- 5 . M . 1999.
- 6 . M . 2003.
- 7 . M . 2005.
- 8 . M . 2009.
- 9 . M . 2011.
- 10 Robert G. Dean Robert A. Dalrymple. Coastal Processes with Engineering Applications M . Cambridge University press 2004.
- 11 Robert T. Hudspeth. Waves and Wave Forces on Coastal and Ocean Structures M . Word Scientific press 2006.
- 12 John N. Newman Marine Hydrodynamics M . The MIT Press 1999.
- 13 . M . 2010.
- 14 . M . 2006.
- 15 . M . 2011.
- 16 . M . 2012.
- 17
- 18
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- 20
- 21
- 22
- 23
- 24
- 25
- 26 Journal of Ocean University of China
- 27 Journal of Marine Science and Application
- 28 Journal of Coastal Research
- 29 Coastal Engineering
- 30 Ocean Engineering
- 31 China Ocean Engineering
- 32 Hydrogeology Journal
- 33 Estuarine Coastal and Shelf Science
- 34 Journal of Waterway Port Coastal and Ocean Engineering
- 35 Journal of Sedimentary Research
- 36 American Association of Petroleum Geologists

城市水务(0815Z1)

(Urban Water Affairs)

学科门类:工学(08) 一级学科:水利工程(0815)

一、学科简介

2002

二、培养目标

三、主要研究方向

1. Urban Water Cycle Mechanism
2. Urban Water Engineering Planning and Management
3. Urban Water Environment and Ecology
4. Urban Wa

五、学分要求和课程设置

	13 - 15	9 - 11
4		
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六、教学环节

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七、论文工作

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9 – 11	00D0001	The First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0004	Multivariate Statistics Analysis	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	01D0301	Advances in Urban Water Affairs	16	1		/	/			
	01D0302	Urban Water Engineering Planning	32	2		/	/			2
	01D0303	Urban Stormwater Management	32	2		/	/			
	01D0205	Remediation Ecology	32	2		/	/			
		Second Foreign Language	48	2						
4	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
	01D0107	Global Climate Change and Water Cycle	32	2		/	/			
	01D0108	The Art of Scientific Presentation and Writing in English	16	1		/				
						/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 1991.
- 2 . M . 2013.
- 3

- 41 Water Resources Management Springer
- 42 Water Science and Engineering Hohai University Press
- 43 Environmental Science and Technology CRC Press
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水利水电建设与管理(0815Z2)

(Construction and Management of Water Resources and Hydropower)

学科门类:工学(08)

一级学科:水利工程(0815)

一、学科简介

2004

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二、培养目标

三、主要研究方向

1. Project Management of Water Conservancy and Hydropower Construction
2. Water Conservancy and Hydropower System Planning and Operation Management
3. Safety Management of Water Conservancy and Hydropower Engineering
4. Comprehensive Evaluation of Water Conservancy and Hydropower Engineering

5.
lic Structures

四、学制和学习年限

	4	6	6
2			5 - 6
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五、学分要求和课程设置

	13 - 15	9 - 11
4		
	1	2
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0002	Modern Methods in Partial Differential Equations	32	2						2 – 4
	88D0003	Stochastic Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	13D0107	Theory and Method of Project Management	32	2						
	13D0102	Management System Engineering	32	2						
	02D0401	Special Topics on Water Conservancy and Hydropower Construction Management	16	1			/			
	02D0402	Running Management on Water Conservancy and Hydropower	32	2			/	/		2
	02D0403	Safety Management of Water Conservancy Project	32	2			/	/		
02D0404	Technology of Water Conservancy Information	32	2			/	/			
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
			32	2			/	/		
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

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| 1 | . | M . | 2011. |
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| 24 | | | |
| 25 | Advances in Water Resources | | |
| 26 | Water Science and Technology | | |
| 27 | Water Science and Engineering | | |
| 28 | Journal of Hydraulic Engineering | | |
| 29 | Journal of Hydraulic Research | | |
| 30 | Journal of Hydrodynamics | | |
| 31 | Construction and Management | | |
| 32 | Science China | | |
| 33 | Journal of Construction Engineering and Management | | |
| 34 | International Journal of Project Management | | |

大地测量学与测量工程(081601)

(Geodesy and Surveying Engineering)

学科门类:工学(08)

一级学科:测绘科学与技术(0816)

一、学科简介

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二、培养目标

三、主要研究方向

1. Modern Theory and Method of Surveying Engineering
2. Theory and Technique of Precise Engineering Surveying
3. Deformation Monitoring and Safety Control

Theory and Technology

4. Satellite geodesy and application

5. Fusion and Application of Multi – source Remote

Sensing

6. GIS Virtual Reality Technology and Three – dimension-

al GIS

7. Satellite Precise Positioning

四、学制和学习年限

	4	6	6
2			5 – 6
7			

五、学分要求和课程设置

	13 – 15	9 – 11
4		
	1	2
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		2 – 3

六、教学环节

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七、论文工作

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本学科推荐阅读的重要书目、专著和学术期刊

- 1 . SCI . 2012.
- 2 . . 1990.
- 3 . . 1997.
- 4 . . 2010.
- 5 . . 2006.
- 6 . . 1998.
- 7 . . 2009.
- 8 . . 2007.
- 9 . . 2010.
- 10 . . 2013.
- 11 . . 2007.
- 12 . . 2002.
- 13 . . 2011.
- 14 . . 2007.
- 15 . . 1998.
- 16 . InSAR . 2012.
- 17 . . 1992.
- 18 . . 2006.
- 19 . . 2004.
- 20 . . 2003.
- 21 . .
- 22 . .
- 23 Journal of Geodesy.
- 24 IEEE Transactions on Geoscience and Remote Sensing Letters.
- 25 Photogrammetric Engineering & Remote Sensing.
- 26 GPS World.
- 27 Survey Review.
- 28 ISPRS of Journal Photogrammety and Remote Sensing.
- 29 Cartography and geographic information science.
- 30 International Journal of Geographical Information Science.
- 31 GeoInformatica.
- 32 Boletim De Ciencias Geodesicas.
- 33 IEEE Journal Of Selected Topics In Applied Earth Observations And Remote Sensing.

地球探测与信息技术(081802)

(Geodetection and Information Technology)

学科门类:工学(08)

一级学科:地质资源与地质工程(0818)

一、学科简介

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二、培养目标

四、学制和学习年限

	4	6	6
	2		5
-6	7		

五、学分要求和课程设置

13 - 15

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxsim in Contemporary China	36	2				/		
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Stochastic Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	11D0301	Applied Geophysics	32	2		/	/			
	11D0302	Special Topics on Geo – engineering	16	1		/	/			
	11D0303	Applied Geochemistry	32	2		/	/			2
	11D0304	Technology of Physical Exploration & well logging	32	2		/	/			
	11D0305	Geochemical Survey	32	2		/	/			
	Second Foreign Language	48	2							
4	66D0002	Intensive Readings of Original Works of Marxsim	18	1				/		
	11D0103	Theory and Method for Tracing Groundwater	32	2		/	/			
	11D0405	Theory and Method for Geo – environmental Monitoring	32	2		/	/			
	11D0404	Theory and Method for Geo – hazard Remediation	32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要参考书目、专著和学术期刊

- 1 1989.
- 2 1990.
- 3 1996.
- 4 2007.
- 5 1997.
- 6 2002.
- 7 2002.
- 8 1980.
- 9 1997.
- 10 樵 1991.
- 11 1997.
- 12 1996.
- 13 2002.
- 14 2004.
- 15 2003.
- 16 1993.
- 17 1992.
- 18 1984.
- 19 1997.
- 20 2004.
- 21 2006.
- 22 Meju M. A. 1996.
- 23 2001.
- 24 2003.
- 25 2006.
- 26 2004.
- 27 Geophysics. American Institute of Physics.
- 28 Geophysical Prospecting. John Wiley & Sons Ltd.
- 29 Journal of Applied Geophysics. Elsevier.
- 30
- 31
- 32 Applied Geophysics. Chinese Geophysical Society.
- 33
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- 36
- 37 Geoscience Frontiers
- 38 The Leading Edge Society of Exploration Geophysicists.
- 39 Advances in Geophysics Elsevier Business Intelligence.
- 40 Geophysical Journal International Oxford University Press.
- 41 Geophysical Research Letters American Institute of Physics
- 42 Journal of Geophysical Research – Solid Earth American Geophysical Union.
- 43 Pure and Applied Geophysic. Springer Publishing Company.
- 44 Reviews of Geophysics. American Institute of Physics.

地质工程 (081803)

(Geological Engineering)

学科门类:工学(08)

一级学科:地质资源与地质工程(0818)

一、学科简介

1952 1978 1986

2003 2006

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二、培养目标

三、主要研究方向

1. Geological Body Stability
2. Safety Monitoring for Geological Body
3. hydrogeology
4. Geological environment and Hazard

四、学制和学习年限

	4	6
6		2
5 - 6	7	

五、学分要求和课程设置

			13 - 15
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Stochastic Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	11D0101	Geo – Modeling and Numerical Analysis	32	2						
	11D0401	Special Topics on Geo – engineering	16	1		/	/			2
	11D0402	Theory and Method for Geo – body Stability	32	2		/	/			
	11D0403	Modern Hydrogeology	32	2		/	/			
	11D0404	Theory and Method for Geo – hazard Remediation	32	2		/	/			
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism classics	18	1			/			2
	11D0405	Theory and Method for Geo – environmental Monitoring	32	2		/	/			
	11D0103	Theory and Method for Tracing Groundwater	32	2		/	/			
	11D0304	Technology of Physical Exploration & well logging	32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 1996.
- 2 Lambe and Whitman. Soil Mechanics. SI Version 1979.
- 3 F. G. H. Blyth & M. H. de Freitas. Geology for Engineers. Seventh Edition. London Edward Ltd 1984.
- 4 Freeze R. A. Cherry J. A. Ground Water Prentice – Hall Inc 1976.
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- 16 1990.
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- 25 Taikan Oki Shinjiro Kanae. Global Hydrological Cycles and World Water Resources. Science 2006.
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- 42 Fredlund D. G. Rahardjo H. Soil Mechanics for Unsaturated Soils. New York John Wiley & Sons 1993.
- 43 Engineering Geology Elsevier Science Publishers.
- 44 Rock Mechanics and Rock Engineering Springer Wien.
- 45 Quarterly Journal of Engineering Geology and Hydrogeology The Geological Society Publishing.
- 46 Hydrogeology Journal Springer Publishing Company.
- 47 Environmental Geology Springer Publishing Company.
- 48 Groundwater John Wiley & Sons.
- 49 Water Resource Research American Geophysical Union.
- 50 Water Resources Management Springer.
- 51 News Journal International Society for Rock Mechanics.
- 52 Journal of Geotechnical & Geoenvironmental Engineering American Society of Civil Engineers.
- 53 Hydrology and Earth System Science European Geophysical Union.
- 54 Journal of Hydrodynamics Ser. B Elsevier.
- 55 Mathematical Problems in Engineering Hindawi Publishing Corporation.

地下水科学与工程(0818Z1)

(Groundwater Science & Engineering)

学科门类:工学(08)

一级学科:地质资源与地质工程(0818)

一、学科简介

2012

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二、培养目标

三、主要研究方向

1. Fluid Mechanics in Porous Media
2. Groundwater Problems in Engineering
3. Groundwater Resources and Environment

四、学制和学习年限

4

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5-6

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五、学分要求和课程设置

13-15

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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Stochastic Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	11D0101	Geo – modeling & Numerical Analysis	32	2						
	11D0102	Special Topics on Groundwater Science and Engineering	16	1		/	/			
	11D0103	Theory and Method for Tracing Groundwater	32	2		/	/			2
	11D0104	Dynamics of Groundwater in Rock Mass	32	2		/	/			
	11D0105	Advanced Hydrogeochemistry	32	2		/	/			
	Second Foreign Language	48	2							
4	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
	11D0405	Theory and Method for Geo – environmental Monitoring	32	2		/	/			
	11D0404	Theory and Method for Geo – hazard Remediation	32	2		/	/			
	11D0304	Technology of Physical Exploration & well logging	32	2		/	/			
			32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

1 Freeze R

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- 39 L. F. Konikow C. E. Neuzil. A method to estimate groundwater depletion from confining layers. Water Resources Research 2007 43 .
- 40 Bear J. Berkowitz B. Groundwater flow and pollution in fractured rock aquifers. Developments in hydraulic engineering 1987 4 .
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- 42 Theis C. V. The relation between the lowering of the piezometric surface and the rate and the duration of discharge of a well using ground – water storage AM. Geophys. Union Trans 1935 16 .
- 43 Groundwater John Wiley & Sons.
- 44 Hydrogeology Journal Springer Publishing Company.
- 45 Environmental Geology Springer Publishing Company.
- 46 Water Resource Management Springer.
- 47 Water Resources Research American Geophysical Union.
- 48 Journal of Geotechnical & Geoenvironmental Engineering American Society of Civil Engineers.
- 49 Hydrology and Earth System Science European Geophysical Union.
- 50 Journal of Hydrology Elsevier Publishing House.
- 51 Journal of Hydrodynamics Ser. B Elsevier.

地学信息工程 (0818Z2)

(Geo - Information Engineering)

学科门类:工学(08)

一级学科:地质资源与地质工程(0818)

一、学科简介

2013

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GIS

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二、培养目标

GPS

GIS

三、主要研究方向

1. Geo - Information Integrated Analysis and Representation
2. Watershed - Scale Remote Sensing of Environment and Applications

3.
ing

四、学制和学习年限

	4	6	6
2			5 - 6
7			

五、学分要求和课程设置

	13 - 15	9 - 11
4		
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	3	
		2 - 3

六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0003	Random Differential Equations	32	2						
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0004	Multivariate Statistical Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	11D0501	Special Topic on Geo – Information Engineering	16	1		/	/			
	11D0502	Geo – Information Science	32	2		/	/			2
	11D0503	Earth Observation	32	2		/	/			
01D0104	Advanced Groundwater Dynamics	32	2		/	/				
4		Second Foreign Language	48	2						
	66D0002	Selected Readings in Marxist classics	18	1			/			2
	01D0105	Theory of Digital Watershed	32	2		/	/			
	11D0504	Geo – Analysis and Modeling	32	2		/	/			
	11D0505	RS Image Understanding	32	2		/	/			
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 Paul A. Longley Michael F. Goodchild David J. Maguire David W. Rhind
2004.
- 2 Kang - tsung Chang 2003.
- 3 Paul A. Longley Michael F. Goodchild
2007.
- 4 2000.
- 5 2007.
- 6 2004.
- 7 GIS 1999.
- 8 2004.
- 9 RS GIS GPS 1995.
- 10 21 2001.
- 11 - 2001.
- 12 2006.
- 13 ? 2001.
- 14 2003.
- 15 2000.
- 16 2001.
- 17 2005.
- 18 - 2006.
- 19 2006.
- 20 John R. Jensen ð Ù

农业工程(0828)

(Agricultural Engineering)

学科门类:工学(08) 一级学科:农业工程(0828)

一、学科简介

2011

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二、培养目标

三、主要研究方向

1. Agricultural Soil and Water Engineering
2. Agricultural Bio - environment and Energy Engi-

neering

3. Protection of Agricultural Soil and Water Resources

四、学制和学习年限

	4	6	6
2			5 - 6
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五、学分要求和课程设置

	13 - 15	9 - 11
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六、教学环节

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 5
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Stochastic Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	02D0501	Special Topics on Agricultural Engineering	16	1			/			
	02D0502	Modern Theory of Irrigation and Drainage	32	2			/	/		2
	02D0503	Modern Agricultural Soil and Water Environment	32	2			/	/		
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
			32	2			/	/		
	99D0103									
	99D0101									
	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2007.
- 2 . M . 2008.
- 3 . M . 2004.
- 4 . M . 2010.
- 5 . M . 2011.
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- 8 . M . 1989.
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26 Water Resources Management

27 Transactions of American Society of Agricultural Engineerings

28 Transaction of ASABE

29 Agricultural Water Management

30 Soil Science Society of American Journal

31 Plant and Soil

32 Pedosphere

33 Journal of Irrigation and Drainage Engineering

34 Applied Engineering in Agriculture

35 Irrigation Science

36 Agriculture and Forestry Meteorology

37 Journal of Soil and Water Conservation

38 Journal of Hydrology

39 Journal of Hydrodynamics

40 Advances in Water Resources

41 Water Science and Technology

42 Water Resources Management

水利机械(0828Z2)

(Hydraulic Engineering Machinery)

学科门类:工学(08) 一级学科:农业工程(0828)

一、学科简介

2011

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二、培养目标

三、主要研究方向

1. Dredging Technology and Equipment
2. Design and Manufacturing of Hydraulic Metal

Structure

3. Mechanical Engineering of Water Resources and Automation

tion

4. Advanced Materials and Processing Technology

四、学制和学习年限

	4	6	6
2			5 - 6
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五、学分要求和课程设置

	13 - 15	9 - 11
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六、教学环节

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8 – 10

9 - 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 - 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0003	Random Differential Equations	32	2						
	88D0005	Reliability Analysis	32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	09D0206	Special Topics on Machinery of Water Resources	16	1		/	/			
	09D0101	Dredging Equipment and Technology	32	2		/	/			2
	09D0201	Modern Machinery Design Theory and Method	32	2		/	/			
09D0202	Mechanical and Electrical System Analysis	32	2		/	/				
09D0203	Modern Signal Processing Technology and Application	32	2		/	/				
4		Second Foreign Language	48	2						
	66D0002	Selected Readings in Marxist classics	18	1			/			
	09D0204	Machine Dynamics	32	2		/	/			2
	09D0205	Robotics And Intelligent Control	32	2		/	/			
	09D0301	Advanced Fluid Mechanics	32	2		/	/			
	09D0302	Nonlinear Problems And Finite Element Method	32	2		/	/			
	09D0401	Interface Behavior Of Material Joining	32	2		/	/			
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本学科推荐阅读的重要书目、专著和学术期刊

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- 21 Wall Wolfgang A. Frenzel Moritz A. Cyron Christian. Isogeometric structural shape optimization J . Computer Methods in Applied Mechanics and E a

31	IEEE Transactions on Automatic Control	IEEE
32	IEEE Transactions on Automation Science and Engineering	IEEE
33	IEEE Transactions on Control Systems Technology	IEEE
34	IEEE Transactions on Fuzzy Systems	IEEE
35	IEEE – Asme Transactions on Mechatronics	IEEE
36	IEEE Transactions on Industrial Electronics	IEEE
37	IET Control Theory and Applications	IET
38	JOURNAL OF HYDRAULIC RESEARCH	International Association for Hydraulic Research
39	JOURNAL OF HYDRAULIC ENGINEERING	American Society of Civil Engineers ASCE
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环境科学与工程(0830)

(Environmental Science and Engineering)

学科门类:工学(0

- 3. Environmental System Planning and Complex Assessment
- 4. Water Pollution Control and Water Treatment Engineering
- 5. Solid Waste Disposal and Resourced Utilization

四、学制和学习年限

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0003	Random Differential Equations	32	2						
	88D0002		32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	05D0102	Modern Chemistry	32	2			/			
	05D0103	Modern Biology	32	2			/			
	05D0101	Special Topic on Environmental Science & Engineering	16	1			/	/		2
	05D0104	Development of Environmental Science & Technology	32	2			/	/		
	05D0105	Ecological System Theory	32	2			/	/		
05D0106	Modern Environmental Simulation Technology	32	2			/	/			
4		Second Foreign Language	48	2						
	66D0002	Selected Readings in Marxist Classics	18	1			/			2
	05D0107	Modern Detecting Technology	32	2			/	/		
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本学科推荐阅读的重要书目、专著和学术期刊

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- 36 Environmental Science & Technology
- 37 Chemosphere
- 38 Environment International
- 39 Environmental Pollution
- 40 Journal of Hazardous Materials
- 41 Science of the Total Environment
- 42 Ecotoxicology and Environmental Safety
- 43 Environmental and Experimental Botany

44	Environmental Geochemistry and Health
45	Environmental Management
46	Environmental Research
47	Environmental Toxicology
48	Environmental Toxicology and Chemistry
49	Journal of Environmental Sciences
50	Water Air & Soil Pollution
51	Journal of Environmental Quality
52	Water Resource Research

生态水利学(0830Z1)

(Ecohydraulic Engineering)

学科门类:工学(08) 一级学科:环境科学与工程(0830)

一、学科简介

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二、培养目标

三、主要研究方向

1. Ecohydrology and Ecohydraulics
2. Evolution Mechanism of Aquatic Ecosystems
3. Utilization and Protection of Water Resources
4. Protection and Remediation of Aquatic Ecological En-

vironment

5.

Water Resources Planning and Manage-

ment and Ecological Effects of Engineering

四、学制和学习年限

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五、学分要求

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六、教学环节

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9 – 11	00D0001	First Foreign Language	48	2						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0001	Applied Functional Analysis	48	3						2 – 4
	88D0002	Modern Methods in Partial Differential Equations	32	2						
	88D0006	Artificial Neural Networks	32	2						
	88D0007	Dynamical Systems Chaos and Fractals	48	3						
	01D0201	Advances in Ecohydrology	16	1		/	/			2
	01D0202	Watershed Ecology	32	2		/	/			
	01D0203	Ecohydraulics	32	2		/	/			
	01D0204	Engineering Ecology	32	2		/	/			
	01D0205	Remediation Ecology	32	2		/	/			
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			2
	01D0206	Advanced Hydrobiology	32	2		/	/			
	01D0207	Advances in technology of molecular ecology	16	1		/	/			
	99D0103									
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	99D0102									

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . M . 2011.
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- 5 . M . 2008.
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- 11 MAY R MCLEANA . 3 M . 2010.
- 12 FORD ED . M . 2012.
- 13 MAGURRAN A E . M . 2011.
- 14 JORGENSENS E BENDORICCHIOG . 3 M . 2008.
- 15 NOWAK M A . 2010.
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- 20 BROOKS KN FOLIOTT PF MAGNER JA. Hydrology and the Management of Watersheds 4th Edition Wiley – Blackwell 2012.
- 21 Ecohydrology Wiley Online Library.
- 22 App^{-B&û}

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IAHS

海岸带资源与环境(0830Z2)

(Coastal Resources and Environment)

学科门类:工学(08)

二级学科:环境科学与工程(0830)

一、学科简介

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二、培养目标

三、主要研究方向

1. Coastal and Marine Dynamics and Disaster Research
2. Coastal and Marine Environmental Monitoring and Informatics
3. Coastal Resources Exploitation Management and Sustainable Development
4. Interaction Between Coastal Structure and Natural Environment
5. Coastal & Estuarine Eco - environment and Wet Land Protection

四、学制和学习年限

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	2					
	66D0001	Marxism in Contemporary China	36	2			/		
	88D0001	Applied Functional Analysis	48	3					2 – 4
	88D0003	Stochastic Differential Equations	32	2					
	88D0002	Modern Methods in Partial Differential Equations	32	2					
	88D0004	Multivariate Statistics Analysis	32	2					
	88D0006	Artificial Neural Networks	32	2					
	03D0201	Special Topic	16	1		/	/		
	03D0102	Advanced Coastal Dynamics	32	2		/	/		2
	03D0202	Advance in Ocean Environment Research	32	2		/	/		
4	00D0002	Second Foreign Language	48	2					
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/		2
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	99D0103								
	99D0101								
	99D0102								

本学科推荐阅读的重要书目、专著和学术期刊

- 1 2005.
- 2 2000.
- 3 1988.
- 4 ? 2009.
- 5 2008.
- 6 2001.
- 7 2011.
- 8 2011.
- 9 Robert M. Sorensen Basic Coastal Engineering Berlin Springer 2006.
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- 11 J. William Kamphuis Introduction to Coastal Engineering and Management World Scientific Publishing Co. Pet. Ltd. 2010.
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软件工程(0835)

(Software Engineering)

学科门类:工学(08) 一级学科:软件工程(0835)

一、学科简介

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二、培养目标

三、主要研究方向

1. Domain Engineering
2. Modeling and Verification of Complex Software Systems
3. Data Management & Domain Knowledge Discovery
4. Theory and Technology of Software Security
5. Web Software Engineering

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七、论文工作

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9 – 11	00D0001	First Foreign Language	48	3						
	66D0001	Marxism in Contemporary China	36	2			/			
	88D0004	Multivariate Statistics Analysis	32	2						2 – 4
	07D0103	Advanced Logic	32	2						
	07D0106	Computability & Computational Complexity	32	2						
	07D0301	Domain Engineering	32	2						
	07D0302	Special Topics on Software Engineering	16	1		/	/			
	07D0108	Novel Software Architectures	32	2		/	/			2
	07D0109	Formal Semantics	32	2		/	/			
	07D0102	Distributed Computing & Systems	32	2		/	/			
	07D0107	Principles of Artificial Neural Networks	32	2		/	/			
07D0101	Web Knowledge Representation on the Web	32	2		/	/				
4		Second Foreign Language	48	2						
	66D0002	Intensive Readings of Original Works of Marxism	18	1			/			
	07D0110	Scientific Paper Writing & Publishing	16	1		/	/			2
	07D0111	Digital Media Technology	16	1		/	/			
	07D0112	Data Management & Analysis Technologies	16	1		/	/			
			32	2		/	/			
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本学科推荐阅读的重要书目、专著和学术期刊

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| 10 | ACM Transactions on Programming Languages & Systems ACM http //www. acm. org/toplas | | | | |
| 11 | ACM Transactions on Software Engineering Methodology ACM http //www. acm. org/pubs/tosem/ | | | | |
| 12 | IEEE Transactions on Software Engineering IEEE http //www. computer. org/portal/web/tse/home | | | | |
| 13 | IEEE Transactions on Service Computing IEEE http //www. computer. org/portal/web/tsc | | | | |
| 14 | Information and Software Technology Elsevier http //www. sciencedirect. com/science/journal/09505849 | | | | |
| 15 | Journal of Functional Programming Cambridge University Press
http //journals. cambridge. org/action/displayJournal jid = JFP | | | | |
| 16 | Journal of Software Evolution and Process Wiley http //onlinelibrary. wiley. com/journal/10. 1002/ ISSN
2047 – 7481 | | | | |
| 17 | Journal of Systems and Software Elsevier http //www. journals. elsevier. com/journal – of – systems – and –
software/ | | | | |
| 18 | Requirements Engineering Springer http //www. springer. com/computer/swe/journal/766 | | | | |
| 19 | Software and System Modeling Springer http //www. sosym. org/ | | | | |
| 20 | Software Practice and Experience Wiley http //www3. interscience. wiley. com/cgi – bin/jhome/1752 | | | | |
| 21 | Software Testing Verification and Reliability Wiley http //as. wiley. com/WileyCDA/WileyTitle/productCd
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四、学制和学习年限

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七、论文工作

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	66D0001	Marxiam in Contemporary China	36	2			/			
	13D1301	Research Methods of Management	32	2						2 – 4
	13D1302	Theory and Method of Decision Making	32	2						
	13D1304	Operations Research and Optimization Methods	32	2						
	13D0101	Seminar of Management Science and Engineering Frontiers		1		/	/			
	13D0102	Management System Engineering	32	2						2
	13D0107	Theory and Method of Project Management	32	2						
	13D0108	Information Management and Decision Supporting System	32	2						
	13D0103	Financial Engineering and Risk Management	32	2						
	13D0104	Engineering Management of Water Resources and Hydropower	32	2						
4		Second Foreign Language	48	2						
	66D0002	Selected Readings in Marxist classics	18	1			/			
	13D1303	Modern Economics	32	2						2
	13D0109	Resource and Environmental Management	32	2						
	13D0106	System Model and simulation	32	2						
	13D0105	Logistics and Supply Chain Management	32	2						
			32	2		/	/			
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本学科推荐阅读的重要书目、专著和学术期刊

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- 2 2011.
- 3 2013.
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- 14 HAN J KAMBER M PEI J. Data Mining Concepts and Techniques Third Edition. Elsevier 2012.
- 15 Sheldon M. Ross ú |

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六、教学环节

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	66D0001	Marxism in Contemporary China	36	2			/			
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	13D1302	Theory and Method of Decision Making	32	2						
	13D1304	Operations Research and Optimization Methods	32	2						
	15D0201	Academic Foreland Seminar on Resettlement	16	1			/	/		
	15D0202	Resettlement Management Science	32	2			/	/		2
	15D0203	Resettlement Policy and Implementation Management	32	2			/	/		
	4		Second Foreign Language	48	2					
66D0002		Intensive Readings of Original Works of Marxism	18	1				/		2
15D0204		Resettlement Project Management	16	1			/	/		
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15D0206		Resettlement Economics	16	1			/	/		
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工商管理 (1202)

(Business Administration)

学科门类: 管理学 (12)

一级学科: 工商管理 (1202)

一、学科简介

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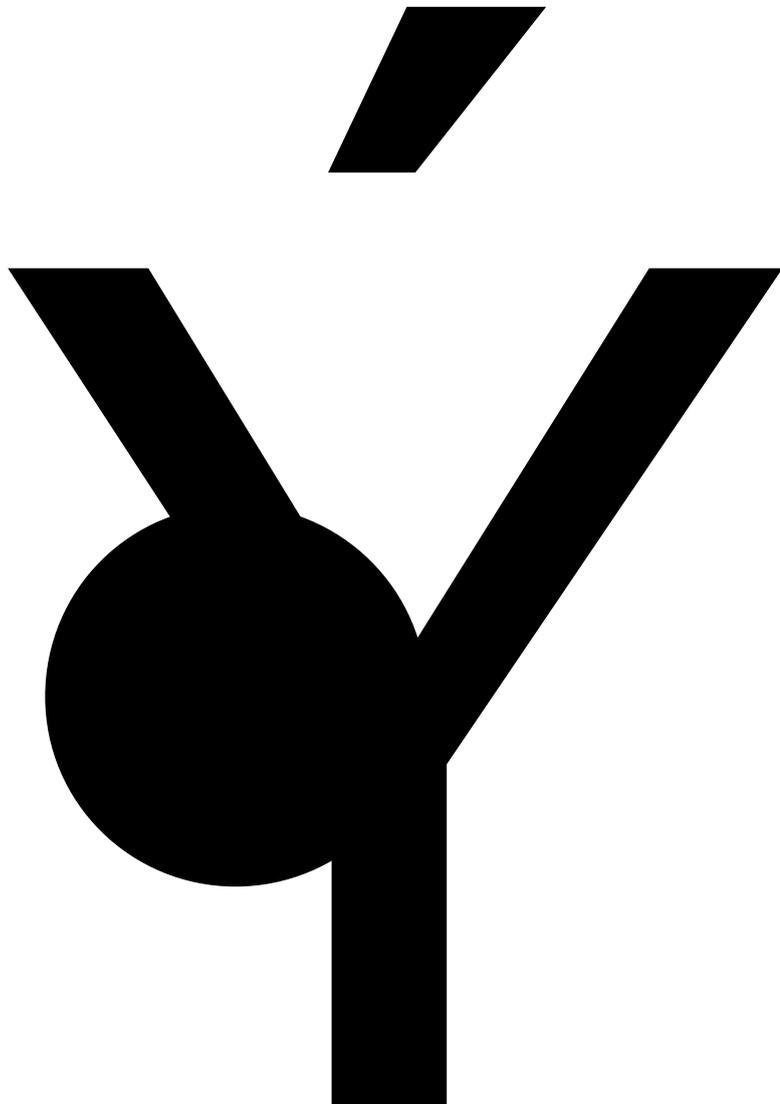
二、培养目标

三、主要研究方向

1. strategy Technology and Management
2. Technology Economics and Management in Water

Resources and Hydropower

3. Business Operation and Marketing
4. Innovation of Technology and Knowledge Management
5. Human Resources and Organization Management
6. Service Outsourcing an



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七、论文工作

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	66D0001	Marxiam in Contemporary China	36	2			/		
	13D1301	Research Methods of Management	32	2					
	13D1302	Theory and Method of Decision Making	32	22					

本学科推荐阅读的重要书目、专著和学术期刊

- 1 . 卷 卷 卷 . 2003 2004
- 2 . - - . 1998
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41	Journal of Financial and Quantitative Analysis
42	Journal of Empirical Finance
43	Financial Management
44	Journal of Marketing American Marketing Association
45	Journal of Marketing Research American Marketing Association
46	Journal of International Marketing American Marketing Association
47	Technovation Elsevier Publishing House
48	Havard Business Review
49	Strategic Management
50	Academy of Management Review
51	Academy of Management Journal
52	China Journal of Accounting Research