Agronomy

Major Code：090101

Major Name：Agronomy

I. Objective System

1. Objectives

(1) General Objectives

Students are trained physically fit and psychologically healthy. They are expected to have a wholesome personality, a value for humanistic pursuits, and a sense of social responsibility, as well as the ability to think critically and innovatively, good writing and communication skills, an orientation towards life-long learning, and a proficiency in organization and management. Moreover, they should have an international mindset and be able to work well in a team context.

(2) Specific Objectives

This program is aimed at cultivating top-notch and compound type individuals who can meet the need of modern agriculture with all-round development, good mastery of modern agriculture, sound theoretical basis of crop science, and basic knowledge and skills. Students are expected to have strong capabilities in doing experiments, practice and innovate, and good scientific literacy. They are also supposed to solve problems in agricultural production and management, and to engage in production, teaching and research, technical extension or development, and production operation and management in agricultural or relevant departments.

2. Basic Knowledge for Graduates Includes

(1) General Knowledge

A1. Arts and humanities, including history, philosophy, literature and art (to train students to understand different perspectives on history, the world, life, values, and aesthetics)

A2. Social science disciplines and their research methods (to equip students with basic research skills, a passion for humanistic pursuits, and an understanding of social responsibility)

A3. Mathematics, logic and physics (to train students to master basic knowledge in mathematics, logical analysis and college physics)

A4. Modern information technology (IT) (to enable students to use modern technologies relevant to the Internet, communications, and information processing)

A5. Ecological environmental studies, life sciences, and economic management (to provide students with a basic understanding of the natural world, economics, civilization, sociology, and more)

(2) Specific knowledge

A6. Basic knowledge of inorganic chemistry, analytical chemistry, organic chemistry and Phytochemistry etc.;

A7. Law of growth and development of plant cells, tissues and organs, as well as plant communities, species, and the investigation, classification, cognitive of germplasm resources;

A8. Basic knowledge and basic rules of life activities of plant processes and their interaction with the surrounding environment and living conditions, etc.;

A9. Constructive metabolism of some main substances in the life activities of plant, such as carbohydrate, fat, protein and nucleic acid and their role in life activities etc.;

A10. Features of genetic variation and biological characters, basic knowledge of genetic information storage, transmission and variation and its material foundation;

A11.Influence of meteorological, microorganisms, soil, plant diseases and insect pests and other disciplines on plant growth and development;

A12. Basic knowledge and skills of experiment design, data analysis, computer processing method, etc.;

A13. Integrated foundation knowledge in agricultural division and product research and development, production, sales etc.;

A14. Basic theory and method of modern biotechnology, information technology and ways to combine these with agriculture so as to upgrade and transform agriculture.

3. Graduate Requirements

(1) General Competencies

B1. To think clearly and express oneself well;

B2. To discover, analyze and solve problems;

B3. To think critically, innovate and pursue lifelong learning;

B4. To organize, manage, direct and cooperate;

B5. To appreciate literary and artistic works.

(2) Specific Competencies

B6. To grasp the development tendency and current issues of the disciplines

B7. To develop new agricultural products and technical innovations;

B8. To systematically solve the problems in agricultural production practice;

B9. To promote agricultural science and technology, service and manage rural community;

B10. To operate the agricultural enterprise and to manage agricultural products;

B11.To cooperate and communicate with people and institutions from abroad.

4. Required Graduate Qualities

(1) General Qualities

C1. To be ambitious and strong-willed (to uphold cultural traditions, seek truth, shoulder unwaveringly the responsibility to rejuvenate the Chinese nation and contribute to humanity;

C2. To be realistic, free of fame lust, hard-working and striving for excellence;

C3. To be strong physically and mentally, have a multicultural and tolerant attitude and a broad international perspective;

C4. To excel in critical thinking and research, strive for constant progress and innovation, have a spirit of exploration and desire to find solutions to world problems

(2) Specific Qualities

C5. Dedication to agriculture serving for agricultural sciences and agricultural production;

C6. Seeking truth from facts, following the laws of nature, and having good academic morality;

C7. Being keen to the discipline development trends and keeping in step with the current issues by continuous learning.

II. General Requirements

Graduates of this major are supposed:

1.To master steady fundamental theories, professional knowledge, and to possess basic skills in crop science and technology, possessing practical, independent and innovative scientific literacy;

2. To Possess capability to implement practice and management in agriculture;

3. To know the development and trend of domestic and international farming and technology;

4. To familiarize with principles, policies and laws related with crop production, environment safety etc., and basic rules in plant product international trade;

5. To master a foreign language, and computer skills;

6. To have basic capabilities in utilizing modern information technology to acquire knowledge and process data;

7. To possess profound humanistic spirit and good health.

III. Primary and Relevant Subjects

Primary subject: Crop Science

Relevant subject: Biology

IV. Core Courses

Botany, Fundamental Biochemistry, Plant Physiology, Genetics, Agricultural and Forest Meteorology,

Agroecology, Experimental Design and Analysis, Plant Protection, Soil and Crop Nutrition, Crop Cultivation, Crop Breeding, Geoponics, Agro-biotechnology.

V. Hands-on Experience

The hands-on experience takes 47 weeks, including military training, physical work, practice of ideological and political theory, engineering training, biology internship, plant resource investigation, comprehensive practice in summer, teaching internship, graduation training (manufacture), thesis (design), etc.

VI. Credits Allocation

Credits \ Course	Courses				Hands-on Experience	Total
	Compulsory		Optional			
	General	Specialized	General	Specialized		
Credits	59.5	22.5	6+x	42（Top-notch Type） 48（Compound Type）	36	166+x（Top-notch Type） 172+x（Compound Type）
Minimum Credits	59.5	22.5	6	36	36	160
Percentage%	37.2	14.1	3.7	22.5	22.5	100

Note： Practice teaching includes hands-on experience and experimental teaching. The ratio of hands-on experience to the total credits of this major =（36+17）/160=33.13%.

VII. Duration of Study

Four Years

VIII. Academic Degree

Bachelor of Agriculture

IX. Credits Requirements

Minimum credits for graduation: 160 Credits (curricular)+8 Credits (extracurricular).

Curricular: 82 credits for compulsory courses, 42 for elective courses, 36 for hands-on experience.

Extracurricular: 8 credits for Innovation, Entrepreneurship and Quality Development.

Total required for graduation: 168 credits.

Table 1 List of Courses for Agronomy

Course Type		Code	Course Title	Credit	Course Length (Hours)	Course length allocation		Compulsory/Elective	College	Semester	Knowledge	Abilities	Qualities
						Lecture	Experiment						
General Courses (40.9%) 65.5 credits	Ideological and Political Subjects	1181001	Essentials of Modern & Contemporary History of China	1.5	24	24		Compulsory 12 Credits	IIPE	2	A1A2	B2B3	C1C3 C4
		3181004	Introduction to Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics	3.5	56	56				6	A1A2	B2B3	C1C2
		1181002	Ideological and Moral Cultivation and Legal Essentials	2.5	40	40				1	A1A2	B3	C2
		2181003	The Fundamental Principles of Marxism	2.5	40	40				3	A1A2	B2B3	C1C3
		2181005	**Current Situation and Policy**	2.0	8 times within 4 years					1~8	A1A2	B2B3	C1C3 C4
	English	1191001	College English I	3.0	64	32	32	Compulsory 12 Credits	DFL	1	A2A5	B11	C3C7
		1191002	College English II	3.0	64	32	32			2	A2A5	B11	C3C7
		2191001	College English III	3.0	64	32	32			3	A2A5	B11	C3C7
		2191002	College English IV	3.0	64	32	32			4	A2A5	B11	C3C7
	P.E.	1241001	P.E. I	1.0	30	30		Compulsory 4 Credits	DPE	1	A2	B3	C3
		1241002	P.E. II	1.0	30	30				2	A2	B3	C3
		2241001	P.E. III	1.0	30	30				3	A2	B3	C3
		2241002	P.E. IV	1.0	30	30				4	A2	B3	C3
	Natural Sciences	1151003	Advanced Mathematics (B)	5.5	88	88		Compulsory 13.5 Credits	CS	1	A3	B1B7	C4C6
		1151005	Linear Algebra	2.0	32	32				2	A3	B1B7	C4C6
		1151007	Probability Theory	2.0	32	32				2	A3	B1B7	C4C6
		2151107	College Physics (C)	3.0	48	48				3	A3	B1B7	C4C6
		2151108	College Physics Experiments (B)	1.0	32		32			4	A3	B1B7	C4C6
		1151203	Inorganic and Analytical Chemistry	5.0	80	80		Compulsory 12.5 Credits	CS	1	A6	B1B7	C4C6
		1151205	Experiments of Inorganic and Analytical Chemistry	1.5	48		48			2	A6	B1B7	C4C6
		1151201	Organic Chemistry	4.0	64	64				2	A6	B1B7	C4C6
		2151202	Organic Chemistry Laboratory	2.0	64		64			3	A6	B1B7	C4C6

Course Type			Code	Course Title	Credit	Course Length (Hours)	Course length allocation		Compulsory/Elective	College	Semester	Knowledge	Abilities	Qualities
							Lecture	Experiment						
	Computer		1091002	Fundamentals of Computer Sciences (B)	2.5	48	32	16	Compulsory 5.5 Credits	CIE	1	A4	B3B6 B7	C7
			1091003	Fundamentals of Programming (VB)	3.0	56	36	20			2	A4	B3B6 B7	C7
General Courses (40.9%) 65.5 credits	GeneralElective			Freshman Seminar	1.0				Elective	CA	1	A5	B6	C5
				Technological Development and Civilization Heritage					Elective 5 Credits (including 1 for Public Art Courses)					
				Civilizations Communication and International Perspective										
				Humanities and Life Values										
				Natural Environment and Social Development										
				Economic Management and Social Sciences										
Subject Courses (36.6%)58.5 credits	Basic Courses in General Discipline		1122101	Botany	3.0	48	48		Compulsory 22.5 Credits	CLS	1	A7	B7B8	C5C6
			1122102	Botany Experiment	1.0	32		32			1	A7	B7B8	C5C6
			2122201	General Biochemistry	3.0	48	48				3	A9	B7B8	C5C6
			2122202	Basic Biochemistry Experiment	1.0	32		32			3	A9	B7B8	C5C6
			2122103	Plant Physiology	3.0	48	48			CLS	4	A8	B7B8	C5C6
			2122104	Experiment on Plant Physiology	1.0	32		32		CLS	4	A8	B7B8	C5C6
			2012001	Genetics	3.5	64	48	16		CA	4	A10	B7B8	C5C6
			1152199	Agricultural and Forest Meteorology	2.5	48	32	16		CS	2	A11	B7B8	C5C6
			2012002	Agroecology	2.0	32	32			CA	3	A7A8	B7B8	C5C6
			2122301	Microbiology	2.5	48	32	16		CLS	3	A11	B7B8	C5C6
Subject Courses (36.6%)58.5 credits	Top-notch Type	Basic Courses in Discipline	2013004	Experimental Design and Analysis	2.0	32	32		Elective 16 Credits	CA	4	A12	B1 B8	C5C6
			2013045	Plant Molecular Biology	2.0	32	32			CA	4	A9 A10 A14	B7B8	C6C7
			3023097	Plant protection	2.0	40	24	16		CPP	5	A11	B7B8	C5C6
			2063707	Soil and Plant Nutrition	2.0	40	24	16		CNRE	5	A11	B7B8	C5C6

Course Type			Code	Course Title	Credit	Course Length (Hours)	Course length allocation		Compulsory/Elective	College	Semester	Knowledge	Abilities	Qualities
							Lecture	Experiment						
	Top-notch Type	Basic Courses in Discipline	3013041	Cell Biology	1.5	24	24			CA	5	A8A9 A14	B7B8	C5C6
			4013049	Plant Genomics and Proteomics	1.5	24	24			CA	7	A8A9 A10 A14	B7B8	C6C7
			4013046	Plant Molecular Genetics	1.5	24	24			CA	7	A5A10	B7B11	C3C7
Subject Courses (36.6%)58.5 credits			3013048	Genetic Engineering	2.0	40	24	16		CA	6	A8A9 A10 A14	B7B8	C6C7
			3013038	Bioinformatics	1.5	28	20	8		CA	7	A14	B6 B7 B8	C6C7
			3013024	Computer Data Processing	2.0	40	24	16		CA	5	A4 A12	B7B8	C6C7
		Specialized courses	3014007	Crop Cultivation	3.0	48	48		Elective 20 Credits	CA	5	A13	B7B8	C5C6 C7
			3014006	Breeding of Plants	3.0	48	48			CA	6	A13	B7B8	C5C6 C7
			3013071	Geoponics	2.0	32	32			CA	6	A13	B8	C5C6 C7
			3013068	Agricultural Biotechnology	2.0	40	24	16		CA	5	A14	B7B8	C5C6 C7
			3014036	Agricultural Resources and Regional Planning	2.0	32	32			CA	6	A13	B8B9	C5C6 C7
			3013017	Plant Resource Science	2.0	32	32			CA	6	A7	B7B8	C6C7
			3013023	Dryland Farming	2.0	32	32			CA	6	A13	B8	C5C6 C7
			3014035	Agricultural Information Technology	2.0	32	32			CA	5	A14	B7B8	C5C6 C7
			3014064	Seed Science	2.0	40	24	16		CA	5	A14	B8	C5C6
			3014005	Crop Physiological Ecology	2.0	32	32			CA	5	A8 A13	B7B8	C5C6
			3014039	Utilization of Experimental Plants	2.0	32	32			CA	6	A7	B2B3 B8	C2C4 C5C6

Course Type			Code	Course Title	Credit	Course Length (Hours)	Course length allocation		Compulsory/Elective	College	Semester	Knowledge	Abilities	Qualities
							Lecture	Experiment						
	Compound Type	Basic Courses in Discipline	2013004	Experimental Design and Analysis	2.0	32	32		Elective 16 Credits	CA	4	A12	B1B8	C5C6
			2013045	Plant Molecular Biology	2.0	32	32			CA	4	A9 A10 A14	B7B8	C6C7
			3023097	Plant protection	2.0	40	24	16		CPP	5	A11	B7B8	C5C6
			2063707	Soil and Plant Nutrition	2.0	40	24	16		CNRE	5	A11	B7B8	C5C6
			3013024	Computer Data Processing	2.0	40	24	16		CA	5	A4 A12	B7B8	C6C7
			3013017	Plant Resource Science	2.0	32	32			CA	6	A7	B7B8	C6C7
Subject Courses (36.6%)58.5 credits	Compound Type	Basic Courses in Discipline	3133002	Marketing	2.0	32	32			CEM	6	A13	B9 B10	C5C7
			3013034	Agriculture Systems Engineering	2.0	32	32			CA	6	A12	B8 B10	C5C7
			3133013	Principles of Management	2.0	32	32			CEM	6	A5 A13	B9 B10	C5C7
			3013023	Dryland Farming	2.0	32	32			CA	6	A13	B8	C5C6 C7
Subject Courses (36.6%)58.5 credits	Compound Type	Specialized Courses	3014001	Crop Cultivation	2.0	32	32		Elective 20 Credits	CA	5	A13	B7B8	C5C6 C7
			3014004	Breeding of Plants	2.0	32	32			CA	6	A13	B7B8	C5C6 C7
			3013071	Geoponics	2.0	32	32			CA	6	A13	B8	C5C6 C7
			3013068	Agricultural Biotechnology	2.0	40	24	16		CA	5	A14	B7B8	C5C6 C7
			3014036	Agricultural Resources and Regional Planning	2.0	32	32			CA	6	A13	B8B9	C5C6 C7
			3014035	Agricultural Information Technology	2.0	32	32			CA	5	A14	B6B8	C5C6 C7
			3014031	Regional Development and Industrialization of Agriculture	2.0	32	32			CA	5	A13	B8 B9	C5C6 C7
			3132003	Principle of Accountancy	2.0	32	32			CEM	6	A5 A13	B10	C5C7
			3014033	Agricultural popularization	2.0	32	32			CA	6	A13	B8B9 B10	C5C7

Course Type			Code	Course Title	Credit	Course Length (Hours)	Course length allocation		Compulsory/Elective	College	Semester	Knowledge	Abilities	Qualities
							Lecture	Experiment						
Subject Courses (36.6%)58.5 credits	Compound Type	Specialized Courses	3014028	Agrotechnology	2.0	40	24	16		CA	6	A13	B8B9	C5C7
			3013037	Protected Farming	2.0	32	32			CA	5	A13	B8B9	C5C7
			3014039	Utilization of Experimental Plants	2.0	32	32			CA	6	A7A8 A9 A10	B2B3 B8	C2C4 C5C6
			3013065	Agrotechnical Economics	2.0	32	32			CA	6	A5 A13	B8B9 B10	C5C7
			3013022	Creative Agricultural Design	2.0	32	32			CA	5	A13	B6B7 B8B9	C4C5 C6C7
Hands-on experience(22.5%)36 credits	Hands-on experience		1305102	Military Training	1.0	2 weeks			Compulsory 36 Credits					
			1301001	National Defense Education	1.0									
			1305201	Physical Work		4 weeks								
			1305301	Social Practice Activities										
			1185007	Practice of Ideological and Political Theories	4.0	4 weeks				IIPE	2	A1A2	B4	C1C3
			1085003	Engineering Training (C)	1.0	1 weeks				CMEE	1	A3	B2	C5
			1125106	Biology Internship	1.0	1 weeks				CLS	2	A7	B8	C6
			2015026	Research Training I	2.0	2 weeks				CA	3	A11 A12 A13 A14	B7B8	C5C7
			2015027	Research Training II	2.0	2 weeks				CA	4	A11 A12 A13 A14	B7B8	C5C7
			2015040	Comprehensive Practices in Summer	2.0	2 weeks				CA	4	A11 A13 A14	B9	C5C7

Course Type		Code	Course Title	Credit	Course Length (Hours)	Course length allocation		Compulsory/Elective	College	Semester	Knowledge	Abilities	Qualities
						Lecture	Experiment						
		3015025	Teaching Practice	12	12 weeks				CA	5, 6	A12 A13 A14	B7B8	C5C6 C7
		4305001	Dissertation	10	14 weeks				CA	7, 8	A12 A13 A14	B2B7 B8	C5C6 C7
Innovation, entrepreneuring and quality education				8.0				Compulsory 8Credits					

Table 2 Guidance Teaching Plan for Agronomy (Top-notch)

First Semester			Second Semester		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
1181002	Ideological and Moral Cultivation and Legal Essentials	2.5	1181001	Essentials of Modern & Contemporary History of China	1.5
1191001	College English I	3.0	1191002	College English II	3.0
1241001	P.E. I	1.0	1241002	P.E. II	1.0
1151003	Advanced Mathematics (B)	5.5	1151005	Linear Algebra	2.0
1151203	Inorganic and Analytical Chemistry	5.0	1151007	Probability Theory	2.0
1122101	Botany	3.0	1091003	Fundamentals of Programming (VB)	3.0
1122102	Botany Experiment	1.0	1151205	Experiments of Inorganic and Analytical Chemistry	1.5
1091002	Fundamentals of Computer Sciences B	2.5	1151201	Organic Chemistry	4.0
			1152199	Agricultural and Forest Meteorology	2.5
Total	23.5 Credits (compulsory)		Total	20.5 Credits (compulsory)	
Total credits for this semester is 28.5. * 2 credits for Elective General Courses (40.9%). *2 compulsory credits for Military Training (National Defense Education). * 1 credit for Engineering Training (C).			Total credits for this semester is 25.5. * 4 credits for Practice of Ideological and Political Theories. * 4 credits (compulsory) for Biology Internship.		
Third Semester			**Fourth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
2181003	The Fundamental Principles of Marxism	2.5	2191002	College English IV	3.0
2191001	College English III	3.0	2241002	P.E. IV	1.0
2241001	P.E. III	1.0	2122103	Plant Physiology	3.0
2151107	College Physics (C)	3.0	2122104	Experiment on Plant Physiology	1.0
2151202	Organic Chemistry Laboratory	2.0	2012001	Genetics	3.5
2122201	General Biochemistry	3.0	2151108	College Physics Experiments (B)	1.0
2122202	Basic Biochemistry Experiment	1.0			
2122301	Microbiology	2.5			
2012002	Agroecology	2.0			

Total	20 Credits (compulsory)		Total	12.5 Credits (compulsory)	
Total credits for this semester is 24. * 2 credits for Elective General Courses. *2 credits for Research Training.			Total credits for this semester is 22.5. * 2 credits for Elective General Courses. *2 credits for Research Training. *2 credits (compulsory) for Comprehensive Practices in summer vocation. * 4 credits courses are suggested from elective course.		
Fifth Semester			**Sixth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
			3181004	Introduction to Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics	3.5
Total	0 Credit (compulsory)		Total	3.5 Credits (compulsory)	
Total credits for this semester is 22. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 16 credits courses are suggested from elective courses.			Total credits for this semester is 24.5. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 15 credits courses are suggested from elective courses.		
Seventh Semester			Eighth Semester		
Course Code	Course Title	Credit	Course Code	Course Title	Credit
Total	0 credit (compulsory)		Total	0 credit (compulsory)	
Total credits for this semester is 8. * 3 credits courses are suggested from elective courses. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).			Total credits for this semester is 5. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).		

Table 2 Guidance Teaching Plan for Agronomy (Compound)

First Semester			Second Semester		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
1181002	Ideological and Moral Cultivation and Legal Essentials	2.5	1181001	Essentials of Modern & Contemporary History of China	1.5
1191001	College English I	3.0	1191002	College English II	3.0
1241001	P.E. I	1.0	1241002	P.E. II	1.0
1151003	Advanced Mathematics (B)	5.5	1151005	Linear Algebra	2.0
1151203	Inorganic and Analytical Chemistry	5.0	1151007	Probability Theory	2.0
1122101	Botany	3.0	1091003	Fundamentals of Programming (VB)	3.0
1122102	Botany Experiment	1.0	1151205	Experiments of Inorganic and Analytical Chemistry	1.5
1091002	Fundamentals of Computer Sciences B	2.5	1151201	Organic Chemistry	4.0
			1152199	Agricultural and Forest Meteorology	2.5
Total	23.5 Credits (compulsory)		Total	20.5 Credits (compulsory)	
Total credits for this semester is 28.5. * 2 credits for Elective General Courses. * 2 compulsory credits for Military Training (National Defense Education). * 1 credit for Engineering Training (C).			Total credits for this semester is 25.5. * 4 credits for Practice of Ideological and Political Theories. * 4 credits (compulsory) for Biology Internship.		
Third Semester			**Fourth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
2181003	The Fundamental Principles of Marxism	2.5	2191002	College English IV	3.0
2191001	College English III	3.0	2241002	P.E. IV	1.0
2241001	P.E. III	1.0	2122103	Plant Physiology	3.0
2151107	College Physics (C)	3.0	2122104	Experiment on Plant Physiology	1.0
2151202	Organic Chemistry Laboratory	2.0	2012001	Genetics	3.5
2122201	General Biochemistry	3.0	2151108	College Physics Experiments (B)	1.0
2122202	Basic Biochemistry Experiment	1.0			
2122301	Microbiology	2.5			
2012002	Agroecology	2.0			

Total	20 Credits (compulsory)		Total	12.5 Credits (compulsory)	
Total credits for this semester is 24. * 2 credits for Elective General Courses. *2 credits for Research Training.			Total credits for this semester is 22.5. * 2 credits for Elective General Courses. *2 credits for Research Training. *2 credits (compulsory) for Comprehensive Practices in summer vocation. * 4 credits courses are suggested from elective courses.		
Fifth Semester			**Sixth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
			3181004	Introduction to Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics	3.5
Total	0 credit (compulsory)		Total	3.5 Credits (compulsory)	
Total credits for this semester is 22. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 16 credits courses are suggested from elective courses.			Total credits for this semester is 27.5. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 18 credits courses are suggested from elective courses.		
Seventh Semester			Eighth Semester		
Course Code	Course Title	Credit	Course Code	Course Title	Credit
	0 credit (compulsory)		Total	0 credit (compulsory)	
Total credits for this semester is 5. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).			Total credits for this semester is 5. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).		

Table 2 Guidance Teaching Plan for Agronomy (Top-notch)

First Semester			Second Semester		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
1181002	Ideological and Moral Cultivation and Legal Essentials	2.5	1181001	Essentials of Modern & Contemporary History of China	1.5
1191001	College English I	3.0	1191002	College English II	3.0
1241001	P.E. I	1.0	1241002	P.E. II	1.0
1151003	Advanced Mathematics (B)	5.5	1151005	Linear Algebra	2.0
1151203	Inorganic and Analytical Chemistry	5.0	1151007	Probability Theory	2.0
1122101	Botany	3.0	1091003	VB Fundamentals of Programming (VB)	3.0
1122102	Botany Experiment	1.0	1151205	Experiments of Inorganic and Analytical Chemistry	1.5
1091002	Fundamentals of Computer Sciences B	2.5	1151201	Organic Chemistry	4.0
			1152199	Agricultural and Forest Meteorology	2.5
Total	23.5 Credits (compulsory)		Total	20.5 Credits (compulsory)	
Total credits for this semester is 28.5. * 2 credits for Elective General Courses (40.9%). *2 compulsory credits for Military Training (National Defense Education). * 1 credit for Engineering Training (C).			Total credits for this semester is 25.5. * 4 credits for Practice of Ideological and Political Theories. * 4 credits (compulsory) for Biology Internship.		
Third Semester			**Fourth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
2181003	The Fundamental Principles of Marxism	2.5	2191002	College English IV	3.0
2191001	College English III	3.0	2241002	P.E. IV	1.0
2241001	P.E. III	1.0	2122103	Plant Physiology	3.0
2151107	College Physics (C)	3.0	2122104	Experiment on Plant Physiology	1.0
2151202	Organic Chemistry Laboratory	2.0	2012001	Genetics	3.5
2122201	General Biochemistry	3.0	2151108	College Physics Experiments (B)	1.0
2122202	Basic Biochemistry Experiment	1.0			
2122301	Microbiology	2.5			
2012002	Agroecology	2.0			

Total	20 Credits (compulsory)		Total	12.5 Credits (compulsory)	
Total credits for this semester is 24. * 2 credits for Elective General Courses. *2 credits for Research Training.			Total credits for this semester is 22.5. * 2 credits for Elective General Courses. *2 credits for Research Training. *2 credits (compulsory) for Comprehensive Practices in summer vocation. * 4 credits courses are suggested from elective course.		
Fifth Semester			**Sixth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
			3181004	Introduction to Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics	3.5
Total	0 Credit (compulsory)		Total	3.5 Credits (compulsory)	
Total credits for this semester is 22. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 16 credits courses are suggested from elective courses.			Total credits for this semester is 24.5. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 15 credits courses are suggested from elective courses.		
Seventh Semester			Eighth Semester		
Course Code	Course Title	Credit	Course Code	Course Title	Credit
Total	0 credit (compulsory)		Total	0 credit (compulsory)	
Total credits for this semester is 8. * 3 credits courses are suggested from elective courses. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).			Total credits for this semester is 5. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).		

Table 2 Guidance Teaching Plan for Agronomy (Compound)

First Semester			Second Semester		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
1181002	Ideological and Moral Cultivation and Legal Essentials	2.5	1181001	Essentials of Modern & Contemporary History of China	1.5
1191001	College English I	3.0	1191002	College English II	3.0
1241001	P.E. I	1.0	1241002	P.E. II	1.0
1151003	Advanced Mathematics (B)	5.5	1151005	Linear Algebra	2.0
1151203	Inorganic and Analytical Chemistry	5.0	1151007	Probability Theory	2.0
1122101	Botany	3.0	1091003	Fundamentals of Programming (VB)	3.0
1122102	Botany Experiment	1.0	1151205	Experiments of Inorganic and Analytical Chemistry	1.5
1091002	Fundamentals of Computer Sciences B	2.5	1151201	Organic Chemistry	4.0
			1152199	Agricultural and Forest Meteorology	2.5
Total	23.5 Credits (compulsory)		Total	20.5 Credits (compulsory)	
Total credits for this semester is 28.5. * 2 credits for Elective General Courses. * 2 compulsory credits for Military Training (National Defense Education). * 1 credit for Engineering Training (C).			Total credits for this semester is 25.5. * 4 credits for Practice of Ideological and Political Theories. * 4 credits (compulsory) for Biology Internship.		
Third Semester			**Fourth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
2181003	The Fundamental Principles of Marxism	2.5	2191002	College English IV	3.0
2191001	College English III	3.0	2241002	P.E. IV	1.0
2241001	P.E. III	1.0	2122103	Plant Physiology	3.0
2151107	College Physics (C)	3.0	2122104	Experiment on Plant Physiology	1.0
2151202	Organic Chemistry Laboratory	2.0	2012001	Genetics	3.5
2122201	General Biochemistry	3.0	2151108	College Physics Experiments (B)	1.0
2122202	Basic Biochemistry Experiment	1.0			
2122301	Microbiology	2.5			
2012002	Agroecology	2.0			

Total	20 Credits (compulsory)		Total	12.5 Credits (compulsory)	
Total credits for this semester is 24. * 2 credits for Elective General Courses. *2 credits for Research Training.			Total credits for this semester is 22.5. * 2 credits for Elective General Courses. *2 credits for Research Training. *2 credits (compulsory) for Comprehensive Practices in summer vocation. * 4 credits courses are suggested from elective courses.		
Fifth Semester			**Sixth Semester**		
Course Code	**Course Title**	**Credit**	**Course Code**	**Course Title**	**Credit**
			3181004	Introduction to Mao Zedong Thought and Theoretical System of Socialism with Chinese Characteristics	3.5
Total	0 credit (compulsory)		Total	3.5 Credits (compulsory)	
Total credits for this semester is 22. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 16 credits courses are suggested from elective courses.			Total credits for this semester is 27.5. *Teaching is to be arranged in the 5-6th semester with 12 credits (6 credits this semester). * 18 credits courses are suggested from elective courses.		
Seventh Semester			Eighth Semester		
Course Code	Course Title	Credit	Course Code	Course Title	Credit
	0 credit (compulsory)		Total	0 credit (compulsory)	
Total credits for this semester is 5. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).			Total credits for this semester is 5. *Graduation thesis writing is to be arranged in the 7-8th semester with 10 credits (5 credits this semester).		