

Ohio State ATI

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May 21, 2015

Dr. Steve Neal Assistant Dean for Academic Affairs 100E Agricultural Administration Building 2120 Fyffe Rd Columbus, OH 43210

Dear Dr. Neal,

Enclosed please find the proposed curriculum plans for the Greenhouse and Nursery Management (GHNRMGT-AA) major with Greenhouse (GRN), Nursery (NRY) and Greenhouse Engineering Technology (GET) specializations, submitted for consideration by the FAES Academic Affairs Committee. The modifications of the current curriculum plan respond to the Ohio Board of Regents revised requirements for this degree program as indicated in the revised OBR Guidelines and Procedures for Academic Program Review document, and are in alignment with the approved curriculum plan template for the Ohio State ATI Associate of Applied Science degree program. These changes address the reduction in credit hours and alignment with the general education curriculum for this degree program. In addition, the proposed curriculum plan provides students with a course of study that will prepare them to be successful in their careers in the greenhouse and nursery industries.

Two of the proposed Greenhouse and Nursery Management Specialization curriculum plans (Greenhouse Specialization and Nursery Specialization) were developed by Dr. Robert W. McMahon, Coordinator of the Greenhouse and Nursery Management program. The courses that are included in the current and proposed curriculum plans were selected in consultation with other faculty involved in the program as well as members of the Greenhouse Specialization Advisory Committee. The proposed separate curriculum plans and course sequences for the Greenhouse and Nursery Specialization programs were approved by Division of Horticultural Technologies faculty and the Ohio State ATI Academic Affairs Committee.

The changes in both specializations reduce the number of credits in the Non-Technical Studies' General Education category Arts and Humanities by 3, reduce the number of credits in the Technical category by 3, and increase the number of credits in the Applied General Education category by 6. The number of credits for both the Greenhouse and Nursery Specializations remain unchanged at 63.

The following are the specific changes that apply to both the Greenhouse and Nursery Specializations:

- 1. Remove the Humanities elective (3)
- 2. Remove the BIOTECH/HORTTEC Elective (3)
- 3. Require BIOTECH 2218T General and Applied Entomology (3) and HORTTEC 2890T Plant Diseases of Ornamentals and Turf (3).

Also included in this proposal is the new specialization of Greenhouse Engineering Technology (GET). This proposal was developed by Dr. Robert McMahon, Coordinator of the Greenhouse and Nursery Management program and Dr. Peter Ling, Associate Professor in the Department of Food, Agricultural and Biological Engineering. The Greenhouse Engineering Technology Specialization is proposed to meet increasing engineering technology needs of the horticulture industry for sustainable ornamental, vegetable, and fruit production, particularly with regard to installation, programming, operation and maintenance of computerized environmental control

systems and automated plant production equipment. As more advanced technologies have been incorporated into horticultural plant production, there are critical needs for qualified industry personnel to effectively and efficiently implement these technologies to more profitably manage greenhouse businesses in keeping with the goals of sustainable agriculture.

The Greenhouse Engineering Technology Specialization closely parallels both the Greenhouse Specialization and the Nursery Specialization within the Greenhouse and Nursery Management program. Total credit hours mirror the 63 credits required in those specializations as well. Three new courses developed for this specialization are:

- 1. HORTTEC 2191.23T: Greenhouse Engineering Technology Internship
- 2. HORTTEC 3550T: Components of Greenhouse Technologies
- 3. HORTTEC 3560T: Integrated Greenhouse Climate Control

The results of surveys of the Ohio greenhouse industry and teachers of high school horticulture support this proposed new specialization, as do the Chairs of the Department of Horticulture and Crop Science, the Department of Food, Agricultural, and Biological Engineering, and the ATI Division of Agricultural and Engineering Technologies. The GET specialization was approved by Division of Horticultural Technologies faculty, the Ohio State ATI Academic Affairs Committee and the Ohio State ATI faculty.

Ohio State ATI is committed to protecting the academic progress of students. In order that this package of Greenhouse and Nursery Management proposed changes will not disrupt progress toward their degrees, course substitutions and manual management of degree audits will occur as needed for students enrolled in this degree program during the transition. When appropriate, coursework completed by students under the current degree program will be utilized for completion of the proposed degree program.

Enclosed please find the following documents:

- Current curriculum plans and course sequences for the Greenhouse Specialization and the Nursery Specialization of the Greenhouse and Nursery Management degree program
- Proposed curriculum plans and course sequences for the Greenhouse Specialization, the Nursery Specialization, and the Greenhouse Engineering Technology Specialization of the Greenhouse and Nursery Management degree program
- List of Non-Technical Course Options at Ohio State ATI

Please let me know if there are questions or additional information or documentation is required to accompany this submission. We look forward to hearing from the FAES Academic Affairs Committee regarding next steps in the approval process.

Sincerely,

Jeanne M. Osborne

Jeanne W. Osborne

Assistant Director, Academic Affairs

OHIO STATE ATI ASSOCIATE OF APPLIED SCIENCE DEGREE

NON-TECHNICAL COURSE OPTIONS BY CATEGORY*

GENERAL EDUCATION	APPLIED GENERAL EDUCATION	Other General Education course options for Associate of Science degrees
English Composition/Oral Communication AGRCOMM 3130 ENGLISH 1110.01 - REQUIRED	English Composition/Oral Communication GENCOMM 2115T	English Composition/Oral Communication AGRCOMM 2367 ENR 2367
	Arts and Humanities	
Mathematics/Statistics and Logic GENMATH 1141T	GENHUM 1190.01T, 1190.02T, 1190.03T	Mathematics/Statistics and Logic COMLDR 3537
GENMATH 11411 GENMATH 1145T	Social and Behavioral Sciences	MATH 1130/1131
STAT 1350	BUSTEC 1151T	MATH 1130/1131 MATH 1148/1149/1150/1151
51A1 1330	GENSSC 1171T	WATH 1140/1147/1130/1131
Arts and Humanities	GENSSC 11711 GENSSC 1181T	Arts and Humanities
HISTORY 1152	GENSSC 11811 GENSSC 1182T	COMPSTD 2301
MUSIC 2250	GENSSC 11821	COMI STD 2501
RELSTDS 2370	Applied Sciences	Social and Behavioral Sciences
REESTES 2570	ANMLTEC 3130T	ENR 2300
Social and Behavioral Sciences	ANMLTEC 3150T	ENR 4000
AEDECON 2001	ANMLTEC 3157T	E11R 4000
PSYCH 1100	BIOTECH 2218T	Natural Sciences
RURLSOC 1500	ENGTECH 2050T	BIOLOGY 1113/1114
	ENGTECH 2092T	CHEM 1110
Natural Sciences	ENGTECH 2121T	CHEM 1210/1220
ANMLTEC 2200T and 2300T	ENGTECH 2310T	CHEM 2510/2520
ANMLTEC 3140T	ENGTECH 2322T	ENR 2100
CRPSOIL 2300T and 2301T	ENGTECH 2345T	HCS 2201
GENBIOL 1200T	HORTTEC 2880T	HCS 2202
GENBIOL 1250T	HORTTEC 2890T	MICRBIOL 4000
GENCHEM 1100T		PHYSICS 1200/1201
GENCHEM 1150T	Business	
TECPHYS 1150T	AEDECON 2105	
	ANMLTEC 3800T	
	BUSTEC 1202T	
	BUSTEC 2206T	
	BUSTEC 2207T	
	BUSTEC 2208T	
	BUSTEC 2231T	
	BUSTEC 2232T	
	BUSTEC 2241T	
	BUSTEC 2244T	
	BUSTEC 2247T	

BUSTEC 2249T CRPSOIL 3800T ENGTECH 2331T HORTTEC 2260T HORTTEC 2270T HORTTEC 2620T

 $[\]ensuremath{^{*}}$ May also be used as a technical studies course but can only be used once.

ASSOCIATE OF APPLIED SCIENCE DEGREE GREENHOUSE AND NURSERY MANAGEMENT CURRICULUM PLAN Greenhouse Specialization

Ohio State ATI		Major: Greenhouse Specialization	
Non-Technical Studies		Non-Technical Studies	
General Education	Sem Cr	General Education	Sem Cr.
Category		Course	
ENGLISH COMPOSITION/	3	ENGLISH 1110.01	3
ORAL COMMUNICATION			
ENGLISH 1110.01			
MATHEMATICS/STATISTICS AND	3	GENMATH 1141T	3
LOGIC		A FREGOVIANA	
SOCIAL/BEHAVIORAL SCIENCES OR ARTS AND HUMANITIES	3	AEDECON 2001	3
OR ARTS AND HUMANTIES			
NATURAL SCIENCES	3	GENBIOL 1250T	4
From any of the General Education	3	GENCHEM 1100T	3
categories (listed above)			
Total General	min. 15	Total General	16
Applied General Education		Applied General Education	
Courses determined by program from the		AEDECON 2105	3
following:		BIOTECH 2218T	3
		HORTTEC 2890T	3
General Education categories		AGRCOMM 3130	3
Applied Sciences		BUSTEC 1202T	1
Business		GENSSC 1181T	3
COLLEGE/CAREER	1	GENSTDS 1201T	0.5
ORIENTATION		HORTTEC 1201T	0.5
Total Non-Technical Studies	min.	Total Non-Technical Studies	33
	½ degree		
	total		
	credits		
Technical Studies		Technical Studies	
Industry/Practical Experience		HORTTEC 2189.21T	2
3 (min)- 9 (max) [min 2 cr internship]		HORTTEC 2190.21T	2
- (· · · · · · · · · · · · · · · · · ·		HORTTEC 2191.21T	3
Other courses determined by program		BIOTECH 2219T	3
V 1 C		HORTTEC 2110T	3
		HORTTEC 2150T	2
		HORTTEC 2500T	4
		HORTTEC 2520T	3
		HORTTEC 2540T	4
		HORTTEC 2740T	4
Technical Studies Total	max 35	Technical Studies Total	30
DEGREE TOTAL	60-65	DEGREE TOTAL	63

GHNRMGT-AA GRN Catalog Year 2015-2016

Greenhouse and Nursery Management Greenhouse Specialization Associate of Applied Science

<u>Course</u>	<u>Title</u>		Credits
1st Year—Autumn See ENGLISH 1110.01 GENBIOL 1250T GENMATH 1141T GENSTDS 1201T HORTTEC 1201T *HORTTEC 2189.21T HORTTEC 2500T		First-Year English Composition General Botany with Applications Business Mathematics College Orientation Exploring Horticulture Practicum in Greenhouse Management Greenhouse Environment Control	3 4 3 .5 .5 1 4 16
1st Year—Spring Sen AGRCOMM 3130 BUSTEC 1202T GENSSC 1181T HORTTEC 2150T *HORTTEC 2191.21T		Oral Expression in Agriculture (1st 7 wks) Software Applications (1st 7 wks) Hispanic Culture & Language in the Workplace (1st 7 wks) Horticultural Root Media (1st 7 wks) Greenhouse Management Internship (2nd 7 wks)	3 1 3 2 <u>3</u> 12
May Session *HORTTEC 2191.217	.	Greenhouse Management Internship (continued)	0
Summer Session AEDECON 2001 *HORTTEC 2189.217		Principles of Food and Resource Economics Practicum in Greenhouse Management	3 1 4
2 nd Year—Autumn Sease AEDECON 2105 BIOTECH 2218T BIOTECH 2219T HORTTEC 2110T *HORTTEC 2190.21T HORTTEC 2520T 2 nd Year—Spring Sease GENCHEM 1100T *HORTTEC 2190.21T HORTTEC 2540T HORTTEC 2740T HORTTEC 2890T	nester	Managerial Records and Analysis General and Applied Entomology Pesticides and Their Use Plant Materials I Practical Leadership in Greenhouse Management Greenhouse Perennial Production Introduction to General Chemistry Practical Leadership in Greenhouse Management Greenhouse Bedding and Flowering Pot Plant Production Propagation of Nursery and Greenhouse Plants Plant Diseases of Ornamentals and Turf	3 3 3 1 3 16 3 1 4 4 4 3 15
		Total Credits	63

^{*}A grade of C or better is required to meet graduation requirements

ASSOCIATE OF APPLIED SCIENCE DEGREE GREENHOUSE AND NURSERY MANAGEMENT CURRICULUM PLAN Nursery Specialization

Ohio State ATI		Major: Nursery Specialization	
Non-Technical Studies		Non-Technical Studies	
General Education	Sem Cr	General Education	Sem Cr.
Category		Course	
ENGLISH COMPOSITION/	3	ENGLISH 1110.01	3
ORAL COMMUNICATION			
ENGLISH 1110.01			
MATHEMATICS/STATISTICS AND	3	GENMATH 1141T	3
LOGIC			
SOCIAL/BEHAVIORAL SCIENCES	3	AEDECON 2001	3
OR ARTS AND HUMANITIES			
NATEURAL COLENICES	3	GENBIOL 1250T	1
NATURAL SCIENCES	3	GENBIOL 12501	4
From any of the General Education	3	GENCHEM 1100T	3
categories (listed above)	3	GENCHEW 11001	3
categories (iisted above)			
Total General	min. 15	Total General	16
Total General	11111. 13	Total General	10
Applied General Education		Applied General Education	
Courses determined by program from the		AEDECON 2105	3
following:		BIOTECH 2218T	3
Tonowing.		HORTTEC 2890T	3
General Education categories		AGRCOMM 3130	3
Applied Sciences		BUSTEC 1202T	1
Business		GENSSC 1181T	3
Business		SENSE ITOTI	
COLLEGE/CAREER	1	GENSTDS 1201T	0.5
ORIENTATION		HORTTEC 1201T	0.5
Total Non-Technical Studies	min.	Total Non-Technical Studies	33
	½ degree		
	total		
	credits		
Technical Studies		Technical Studies	
Industry/Practical Experience		HORTTEC 2189.22T	2
3 (min)- 9 (max) [min 2 cr internship]		HORTTEC 2191.22T	3
Other courses determined by program		BIOTECH 2219T	3
		HORTTEC 2150T	2
		HORTTEC 2110T	3
		HORTTEC 2120T	3
		HORTTEC 2410T	4
		HORTTEC 2420T	2
		HORTTEC 2500T	4
		HORTTEC 2740T	4
Technical Studies Total	max 35	Technical Studies Total	30
DEGREE TOTAL	60-65	DEGREE TOTAL	63

GHNRMGT-AA NRY Catalog Year 2015-2016

Greenhouse and Nursery Management Nursery Specialization Associate of Applied Science

<u>Course</u> <u>Title</u>		Credits
1st Year—Autumn Semester		
BUSTEC 1202T	Software Applications	1
ENGLISH 1110.01	First-Year English Composition	3
GENBIOL 1250T	General Botany with Applications	4
GENMATH 1141T	Business Mathematics	3
GENSTDS 1201T	College Orientation	.5
HORTTEC 1201T	Exploring Horticulture	.5
*HORTTEC 2189.22T	Practicum in Nursery Management	1
*HORTTEC 2500T	Greenhouse Environment Control	<u>4</u>
		17
1st Year—Spring Semester		
AGRCOMM 3130	Oral Expression in Agriculture	3
BIOTECH 2218T	General and Applied Entomology	3
HORTTEC 2110T	Plant Materials I	3
HORTTEC 2150T	Horticultural Root Media (1st 7 wks)	2 _4
HORTEC 2410T	Sustainable Nursery Production and Management	4
		15
Summer Term		
*HORTTEC 2191.22T	Nursery Management Internship	$\frac{3}{3}$
		3
2 nd Year—Autumn Semester		
BIOTECH 2219T	Pesticides and Their Use	3
AEDECON 2001	Principles of Food and Resource Economics	3
GENCHEM 1100T	Introduction to General Chemistry	3
GENSSC 1181T	Hispanic Culture & Language in the Workplace	3
HORTTEC 2120T	Plant Materials II	3
*HORTTEC 2189.22T	Practicum in Nursery Management	1
110K11EC 2189.221	Fracticum in Nursery Management	16
2 nd Year—Spring Semester		10
AEDECON 2105	Managerial Records and Analysis	3
HORTTEC 2420T	Garden Center Management	$\overset{3}{2}$
*HORTTEC 2740T	Propagation of Nursery and Greenhouse Plants	4
HORTTEC 2890T	Plant Diseases of Ornamentals and Turf	<u>3</u>
110111111111111111111111111111111111111	Time Dioesco of Ornamentals and Turi	$\frac{3}{12}$
	Total Credits	63

^{*}A grade of C or better is required to meet graduation requirements

ASSOCIATE OF APPLIED SCIENCE DEGREE GREENHOUSE AND NURSERY MANAGEMENT CURRICULUM PLAN Greenhouse Engineering Technology Specialization

Ohio State ATI		Major: Greenhouse Engineering Technology S	pecialization
Non-Technical Studies		Non-Technical Studies	
General Education	Sem Cr	General Education	Sem Cr.
Category		Course	
ENGLISH COMPOSITION/		ENGLISH 1110.01	3
ORAL COMMUNICATION	3		
ENGLISH 1110.01			
MATHEMATICS/STATISTICS AND	3	GENMATH 1145T	3
LOGIC			
SOCIAL/BEHAVIORAL SCIENCES	3		
OR ARTS AND HUMANITIES		AEDECON 2001	3
NATURAL SCIENCES	3	GENBIOL 1250T	4
From any of the General Education	3	GENCHEM 1100T	3
categories (listed above)			
T 4 1 C 1	. 15	T 410	16
Total General	min. 15	Total General	16
Applied General Education		Applied General Education	
Courses determined by program from the		AEDECON 2105	3
following:		BIOTECH 2218T	3
Tollowing.		HORTTEC 2890T	3
General Education categories		AGRCOMM 3130	3
Applied Sciences		BUSTEC 1202T	1
Business		GENSSC 1181T	3
COLLEGE/CAREER	1	GENSTDS 1201T	0.5
ORIENTATION		HORTTEC 1201T	0.5
			17
Total Non-Technical Studies	min.	Total Non-Technical Studies	33
	½ degree		
	total		
	credits		
Technical Studies		Technical Studies	
Industry/Practical Experience		HORTTEC 2189.21T	1
3 (min)- 9 (max) [min 2 cr internship]		HORTTEC 2189.211 HORTTEC 2190.21T	$\begin{array}{c c} & 1 \\ & 1 \end{array}$
5 (mm)- 5 (max) [mm 2 ci internsmp]		HORTTEC 2190.211 HORTTEC 2191.23T	3
Other courses determined by program		HORTTEC 2150T	2
Onici courses acternimed by program		HORTTEC 2500T	4
		HORTTEC 2520T	3
		ENGTECH 2312T	3
		ENGTECH 2322T	3
		ENGTECH 2325T	3
		HORTTEC 3550T	3
		HORTTEC 3560T	4
Technical Studies Total	max 35	Technical Studies Total	30
DEGREE TOTAL	60-65	DEGREE TOTAL	63

GHNRMGT-AA GET Catalog Year 2015-2016

Greenhouse and Nursery Management Greenhouse Engineering Technology Specialization Associate of Applied Science

Course	<u>Title</u>		Credits
1st Year—Autumn Ser ENGLISH 1110.01		First Very English Composition	2
ENGLISH 1110.01 ENGTECH 2312T		First-Year English Composition Engineering Technology Fundamentals	3 3
GENMATH 1145T		Technical Mathematics	3
GENSTDS 1201T		College Orientation	.5
HORTTEC 1201T		Exploring Horticulture	.5
*HORTTEC 2189.21T		Practicum in Greenhouse Management	1
HORTTEC 2500T		Greenhouse Environment Control	_4
			<u>15</u>
1st Year—Spring Sem			
AGRCOMM 3130		Oral Expression in Agriculture	3
BUSTEC 1202T		Software Applications	1
ENGTECH 2322T		Basic Electricity and Electronics	3
GENBIOL 1250T		General Botany with Applications	4
GENSSC 1181T		Hispanic Culture & Language in the Workplace	4 3 <u>2</u>
HORTTEC 2150T		Horticultural Root Media (1 st 7 wks)	$\frac{2}{16}$
Summer Term			
*HORTTEC 2191.23T		Greenhouse Engineering Technology Internship	$\frac{3}{3}$
2 nd Year—Autumn Se	mester		
AEDECON 2001		Principles of Food and Resource Economics	3
BIOTECH 2218T		General and Applied Entomology	3
ENGTECH 2325T		Analog and Digital Electronics	3
HORTTEC 3550T		Components of Greenhouse Technologies	3 3 <u>3</u>
HORTTEC 2520T		Greenhouse Perennial Production	_3
and we are a			15
2 nd Year—Spring Sen			2
AEDECON 2105		Managerial Records and Analysis	3
GENCHEM 1100T		Introduction to General Chemistry Practical Londorship in Greenhouse Management	3
*HORTTEC 2190.21T HORTTEC 2890T		Practical Leadership in Greenhouse Management Plant Diseases of Ornamentals and Turf	1 3
HORTTEC 28901 HORTTEC 3560T		Integrated Greenhouse Climate Control	3 1
HORTILC JJUUI		integrated Orcenilouse Children Control	14

^{*}A grade of C or better is required to meet graduation requirements

63

Total Credits

ASSOCIATE OF APPLIED SCIENCE DEGREE GREENHOUSE AND NURSERY MANAGEMENT CURRICULUM PLAN Greenhouse Specialization

Ohio State ATI – AAS Degree		Major:	Greenhouse Specialization	
		Course Dept. &		
Subject	Sem Crs	Number	Course Title	Crs
Basic & Applied Writing, and	6 cr	GENCOMM 1115T	Technical and Business Writing	3
Speaking/Listening		AGRCOMM 3130	Oral Expression in Agriculture	3
Technical Mathematics	3 cr	GENMATH 1141T	Business Mathematics	3
Natural Science Biology/Zoology/Botany Chemistry Physics	3-5 cr	GENBIOL 1250T	General Botany with Applications	4
Economics and Personal Finance, and Individual development, or Group processes	6 cr	BUSTEC 1151T GENSSC 1181T	General Economics Hispanic Culture and Language in the Workplace	3 3
Culture/Art/Music/Literature	3 cr	HUMANITIES	Elective	3
Intro to Computer Applications	1 cr	BUSTEC 1202T	Software Applications	1
College/Career Orientation		GENSTDS 1201T	College Orientation	0.5
	1 cr	HORTTEC 1201T	Exploring Horticulture	0.5
General Total	23-25 cr		1	24
Other Non-technical Math Writing Culture/Art/Music/Literature Social and Behavioral Science Science and Applied Science	5 cr	GENCHEM 1100T BIOTECH 2219T	Introduction to General Chemistry Pesticides and Their Use	3
Non-Tech Total	28-30 cr			30
Business requirement	2 cr	AEDECON 2105	Managerial Records and Analysis	3
Other courses/content to be	28 cr	HORTTEC 2110T	Plant Materials I	3
determined by technologies		HORTTEC 2150T	Horticultural Root Media	2
		HORTTEC 2500T	Greenhouse Environment Control	4
Industry/Practical experience	3 cr min – 9	HORTTEC 2520T	Greenhouse Perennial Production	3
	cr max (min	HORTTEC 2540T	Greenhouse Bedding and Flower	4
	2 cr internship)	HORTTEC 2740T	Pot Plant Production Propagation of Nursery and	4
		BIOTECH/HORTTEC	Greenhouse Plants Elective	3
		HORTTEC 2189.21T	Practicum in Greenhouse Management	2
		HORTTEC 2190.21T	Practical Leadership in Greenhouse Management	2
		HORTTEC 2191.21T	Greenhouse Management Internship	3
Technical Total	33 min cr			33
Degree Totals	61 cr min– 70 cr max			63

GHNRMGT-AA GRN Catalog Year 2014-2015

Greenhouse and Nursery Management Greenhouse Specialization Associate of Applied Science

Course Ti	<u>itle</u>	Credits
1st Year—Autumn Semes GENBIOL 1250T GENCOMM 1115T GENMATH 1141T GENSTDS 1201T HORTTEC 1201T *HORTTEC 2189.21T HORTTEC 2500T	General Botany with Applications Technical and Business Writing Business Mathematics College Orientation Exploring Horticulture Practicum in Greenhouse Management Greenhouse Environment Control	4 3 3 .5 .5 .5 1 4 16
1st Year—Spring Semester AGRCOMM 3130 BUSTEC 1202T GENSSC 1181T HORTTEC 2150T *HORTTEC 2191.21T	Oral Expression in Agriculture (1 st 7 wks) Software Applications (1 st 7 wks) Hispanic Culture & Language in the Workplace (1 st 7 wks) Horticultural Root Media (1 st 7 wks) Greenhouse Management Internship (2 nd 7 wks)	3 1 3 2 -3 12
May Session *HORTTEC 2191.21T	Greenhouse Management Internship (continued)	0
Summer Session BUSTEC 1151T *HORTTEC 2189.21T	General Economics (online) Practicum in Greenhouse Management	3 1 4
2 nd Year—Autumn Seme AEDECON 2105 BIOTECH 2219T HORTTEC 2110T *HORTTEC 2190.21T HORTTEC 2520T HUMANITIES	Managerial Records and Analysis Pesticides and Their Use Plant Materials I Practical Leadership in Greenhouse Management Greenhouse Perennial Production Elective	3 3 1 3 -3
2 nd Year—Spring Semest GENCHEM 1100T *HORTTEC 2190.21T HORTTEC 2540T HORTTEC 2740T HORTTEC/BIOTECH	Introduction to General Chemistry Practical Leadership in Greenhouse Management Greenhouse Bedding and Flowering Pot Plant Production Propagation of Nursery and Greenhouse Plants Technical elective	3 1 4 4 4 -3 15
	Total Credits	63

^{*}A grade of C or better is required to meet graduation requirements

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Greenhouse and Nursery Management Greenhouse Specialization Associate of Applied Science

Technical Elective options:

BIOTECH 2218T	General and Applied Entomology	3
HORTEC 2890T	Plant Diseases of Ornamentals and Turf	3

Humanities Elective options:

GENHUM 1190.01T	Humanities as a Window on Cultural Pluralism:	The	
	Arts in Ghana	3	3
GENHUM 1190.02T	Humanities as a Window on Cultural Pluralism:		
	Global Arts	3	3
GENHUM 1190.03T	Humanities as a Window on Cultural Pluralism:	US	
	City Arts	3	3
COMPSTD 2370	Introduction to Comparative Religion	3	3
HISTORY 1152	American Civilization since 1877	3	3
MUSIC 2250	Music Cultures of the World	3	3

ASSOCIATE OF APPLIED SCIENCE DEGREE GREENHOUSE AND NURSERY MANAGEMENT CURRICULUM PLAN Nursery Specialization

Ohio State ATI – AAS Degree		Major:	Nursery Specialization	
		Course Dept. &		
Subject	Sem Crs	Number	Course Title	Crs
Basic & Applied Writing, and	6 cr	GENCOMM 1115T	Technical and Business Writing	3
Speaking/Listening		AGRCOMM 3130	Oral Expression in Agriculture	3
Technical Mathematics	3 cr	GENMATH 1141T	Business Mathematics	3
Natural Science	3-5 cr	GENBIOL 1250T	General Botany with Applications	4
Biology/Zoology/Botany				
Chemistry				
Physics		DATE CONTROL OF THE PARTY OF TH		-
Economics and Personal Finance,	6 cr	BUSTEC 1151T	General Economics	3
and Individual development, or		GENSSC 1181T	Hispanic Culture and Language in	3
Group processes	2	LILIA A NUTUC	the Workplace	2
Culture/Art/Music/Literature	3 cr	HUMANITIES PLISTEC 1202T	Elective Seftman Applications	3
Intro to Computer Applications	1 cr	BUSTEC 1202T	Software Applications	1
College/Career Orientation	1	GENSTDS 1201T	College Orientation	0.5
C IT ()	1 cr	HORTTEC 1201T	Exploring Horticulture	0.5
General Total	23-25 cr			24
Other New technical	<i>5</i>	CENCHEM 1100T	Later 1 of the Committee of Chamber	2
Other Non-technical Math	5 cr	GENCHEM 1100T	Introduction to General Chemistry	3
Writing		BIOTECH 2219T	Pesticides and Their Use	3
Culture/Art/Music/Literature		BIOTECH 22191	resticities and Their Use	3
Social and Behavioral Science				
Science and Applied Science				
Non-Tech Total	28-30 cr			30
Tion Teen Total	20 50 61			50
Business requirement	2 cr	AEDECON 2105	Managerial Records and Analysis	3
Other courses/content to be	28 cr	HORTTEC 2110T	Plant Materials I	3
determined by technologies		HORTTEC 2120T	Plant Materials II	3
, ,		HORTTEC 2150T	Horticultural Root Media	2
Industry/Practical experience	3 cr min – 9	HORTTEC 2410T	Sustainable Nursery Management	4
	cr max (min		and Production	
	2 cr	HORTTEC 2420T	Garden Center Management	2
	internship)	HORTTEC 2500T	Greenhouse Environment Control	4
		HORTTEC 2740T	Propagation of Nursery and	4
			Greenhouse Plants	
		BIOTECH/HORTTEC	Elective	3
		HODEEC 2100 225		
		HORTTEC 2189.22T	Practicum in Nursery Management	2
		HORTTEC 2191.22T	Nursery Management Internship	3
Technical Total	33 min cr			33
D T.4-1.	(1 '			(2
Degree Totals	61 cr min–			63
	70 cr max			

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<u>Course</u> <u>Titl</u>	<u>le</u>	Credits
1st Year—Autumn Semester GENBIOL 1250T GENCOMM 1115T GENMATH 1141T GENSTDS 1201T HORTTEC 1201T *HORTTEC 2189.22T	General Botany with Applications Technical and Business Writing Business Mathematics College Orientation Exploring Horticulture Practicum in Nursery Management	4 3 3 .5 .5
BUSTEC 1202T *HORTTEC 2500T 1st Year—Spring Semester	Software Applications Greenhouse Environment Control	1 4 17
AGRCOMM 3130 HORTTEC 2150T HORTTEC 2110T HORTEC 2410T HUMANITIES	Oral Expression in Agriculture Horticultural Root Media (1 st 7 wks) Plant Materials I Sustainable Nursery Production and Management Elective	3 2 3 4 -3 15
Summer Term *HORTTEC 2191.22T	Nursery Management Internship	<u>3</u>
2 nd Year—Autumn Semester BIOTECH 2219T GENSSC 1181T GENCHEM 1100T HORTTEC 2120T *HORTTEC 2189.22T BUSTEC 1151T 2 nd Year—Spring Semester	Pesticides and Their Use Hispanic Culture & Language in the Workplace Introduction to General Chemistry Plant Materials II Practicum in Nursery Management General Economics	3 3 3 1 1 3 16
*HORTTEC 2740T HORTTEC 2420T AEDECON 2105 HORTTEC/BIOTECH	Propagation of Nursery and Greenhouse Plants Garden Center Management Managerial Records and Analysis Technical Elective	4 2 3 -3 12
	Total Credits	63

^{*}A grade of C or better is required to meet graduation requirements

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Technical Elective options:

BIOTECH 2218T	General and Applied Entomology	3
HORTEC 2890T	Plant Diseases of Ornamentals and Turf	3
Humanities Elective	options:	
GENHUM 1190.01T	Humanities as a Window on Cultural Pluralism: The Arts in Ghana	3
GENHUM 1190.02T	Humanities as a Window on Cultural Pluralism:	
GENHUM 1190.03T	Global Arts Humanities as a Window on Cultural Pluralism: US	3
	City Arts	3
COMPSTD 2370	Introduction to Comparative Religion	3
HISTORY 1152	American Civilization since 1877	3
MUSIC 2250	Music Cultures of the World	3