

# SUSTAINABLE LANDSCAPE **HORTICULTURE**

# Program Number 10-001-4 Associate Degree in Applied Science • Four Terms

#### **ABOUT THE PROGRAM**

Sustainable Landscape Horticulture technicians can make a living in a wide variety of ways. This is truly a "green" career. You may work in the disciplines of plant propagation and production for a greenhouse or tree nursery—nurturing plants to be used in landscaping, food production, or sold in retail garden centers. You may also work on landscape maintenance or landscape construction crews for landscape contractors, lawn care service companies, botanical gardens, municipal park departments, golf courses, civil engineering firms, and natural resource management agencies. Work duties are typically outdoors and very hands on. With time and experience, management and consulting opportunities within the field are possible.

#### **PROGRAM OUTCOMES**

- · Analyze growing media.
- · Diagnose plant health.
- · Communicate as a horticulture professional.
- Apply design principles.
- · Provide horticulture maintenance.
- Apply the principles of plant science.

#### CAREER AND EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/ future-students/transfer.

# **ADMISSION TO DO'S**

- · Work with Career Coach to:
- Submit application and \$30 fee.
- Submit official transcripts (high school and other colleges).

# **PROGRAM TO DO'S**

- · Work with Academic Advisor to:
- Complete an assessment for placement (Accuplacer or ACT).
- Complete Functional Abilities Statement of Understanding form.
- Meet to plan your first semester schedule, review your entire plan of study, discuss placement assessment results and complete Program To Do's.

# **APPROXIMATE COSTS**

• \$134.20 per credit tuition (WI resident) plus \$7.38 per credit student activity fee. \$10 per credit online fee. Material fee varies depending on course. Other fees vary by program. Visit gotoltc.edu/financial-aid/tuition-and-fees for details.

### **FINANCIAL AID**

This program is eligible for financial aid. Visit gotoltc.edu/Financial-Aid or talk with your Career Coach about how to apply for aid.

# **SPECIAL NOTE**

To parallel the work cycle of this profession and to provide a potent curriculum including full life cycles of plants and seasonal application of knowledge and skills, this program's instruction meets throughout the summer months and completes in 1 1/2 years.

To avoid multi-term overlap conflicts, students are asked to enroll in the specific courses as planned in your schedule.

# CONTACT

LTC Career Coach 920.693.1162 • CareerCoach@gotoltc.edu

Catalog No.	Class Title C	Credit(s)
10001110 10001127 10001153 10001159 10001180 10001109	Term 1 (Fall) Horticulture Introduction Landscape Design Studio Botany and Soil Science Plants 1 Landscape Installation 1 Landscape Installation 2	3 2 3 2 2 2 2
10001128 10001130 10801196 10806112 10804123 10809198	Term 2 (Winter/Spring) Computer Aided Design for Sustainab Greenhouse & Nursery Production Oral/Interpersonal Communications Principles of Sustainability Math with Business Applications Introduction to Psychology	ility 2 3 3 3 3 16
10001158 10001170 10001172 10001147 10001129 10001140	Term 3 (Late Spring/Summer Plants 2 Facilities Maintenance/Installation Landscape Maintenance Advanced Greenhouse & Nursery Mg Site Inventory and Analysis Advanced Concepts in Horticulture	2 1 3
10001131 10001141 10001143 10001144 10001146 10801197 10809195	Term 4 (Fall) Technology in Horticulture and Landson Plant Communities of Wisconsin Stormwater Structures & Management Sustainable Horticulture Capstone Experience Sustainable Landscape Management Technical Reporting Economics	. 2

**TOTAL 61** 

Curriculum and Program Acceptance requirements are subject to change. Program start dates vary; check with your advisor for details. The tuition and fees are approximate based on 2018-2019 rates.





ADVANCED CONCEPTS IN HORTICULTURE...prepares the student to analyze and implement progressive methods and techniques at the forefront of the horticulture field, such as permaculture, hydroponics, aquaponics, aeroponics, vertical gardening, growing season extension, biodynamic farming, and agroforestry.COREQUISITE: 10001172 Landscape Maintenance or CONDITION: 190013 Management of Sustainable Landscapes admissions requirements met

ADVANCED GREENHOUSE AND NURSERY MANAGEMENT...provides the student with managerial skills and experiences to choose, obtain, propagate, grow, maintain, sell, and determine prices for plants in a greenhouse and nursery context. Students will choose an additional greenhouse/nursery topic for advanced study and application. PREREQUISITE: 10001130 Greenhouse and Nursery Production

BOTANY AND SOIL SCIENCE...introduces the language and nature of botany and biology and makes them relevant to horticulture and landscaping. It also addresses the interactions of healthy plants and soils and examines the physical, chemical, biological, and management characteristics of soils. COREQUISITE: 10001110 Horticulture-Introd

COMPUTER AIDED DESIGN FOR SUSTAINABILITY...will use computer and computer aided design software as tools for design communication; learners will be introduced to the fundamental components of CAD in landscape design. Property lines, topography, site planning, hardscapes, planting plans, andsection view graphics will be covered. PREREQUISITES: 10001114 Computer Applications for Technicians and 10001127 Landscape Design Studio Intro

ECONOMICS...provides the participant with an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems. growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. COREQUISITE: 10838105 Intro Readingand Study Skills or Accuplacer Reading score of 74 or equivalent or CONDITION: 610062 Agribusiness/Financial Basic program admissions met

FACILITIES MAINTENANCE/INSTALLATION...prepares the learner to use hand tools and power tools in basic applications of carpentry, plumbing, and basic electricity. CONDITION: 310011 Horticulture Technician or 100014 Sustainable Landscape Horticulture program requirements met

GREENHOUSE AND NURSERY PRODUCTION...provides the student with the skills to analyze and implement efficient, cost-effective, and sustainable methods of horticultural production in a variety of structures as well as field scenarios. PREREQUISITES: 10001153 Botany and Soil Science and 10001110 Horitculture-Introduction

HORTICULTURE INTRODUCTION...explores plant growth, development, and ecology; plant classification; plant health care; horticultural crops and production; the horticulture industry and related careers; and principles of design and design implementation.

INTRODUCTION TO PSYCHOLOGY...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. COREQUISITE: 10838105 Intro Reading and Study Skills or Accuplacer Reading score of 74 or equivalent

LANDSCAPE DESIGN STUDIO...provides the learner with strategies to develop a structured approach to designing space. Fundamental components of the landscape design process are covered including basic site analysis, plan development and detailing, landscape graphic conventions, and client interactions.

**LANDSCAPE INSTALLATION** 1...investigates techniques used in landscape construction practices. These include the use of specific landscape tools, plan implementation methods, preliminary site survey methods, proper planting, equipment operations & installations of basic landscape features.

LANDSCAPE INSTALLATION 2...builds upon landscape construction methods learned in Introduction to Landscape Installation. Possible projects include mixed material patios, retaining walls, water features, sustainable landscape elements, rain gardens, roof gardens, wooden structures, etc. COREQUISITE: 10001180 Landscape Installation 1

LANDSCAPE MAINTENANCE...assists learner in identifying appropriate cultural practices and dealing with challenges in the landscape, including pruning techniques, insect/disease/abiotic problems; pesticides; turf issues; and resolving situations in the field. Course will also include production, installation, maintenance, and harvest of edible and ornamental plants. PREREQUISITES: 10001110 Horticulture Introduction and 10001153 Botany and Soil Science

MATH WITH BUSINESS APPLICATIONS...covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications. PREREQUISITE: 10834109 Pre-Algebra or equivalent and COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent or CONDITION: 610061 Agribusiness/Agronomy Basic program admissions requirements met

ORAL/INTERPERSONAL COMMUNICATION...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

PLANT COMMUNITIES OF WISCONSIN...enables the student to experience the diversity of the native plant communities throughout the Lakeshore region of Wisconsin and beyond. This course will involve extensive plant and plant community identification and analysis in the field. PREREQUISITES: 10001158 Plants 2 and 10001159 Plants 1 or CONDITION: 190014 Design of Sustainable Landscapes-Adv Certificate admissions requirements met

PLANTS 1...introduces ornamental and weedy woody and herbaceous plant identification and culture/management, focusing on plants encountered in landscaping and production in eastern Wisconsin and the Midwest. This is the first course of a two-course series that continues as Plants 2.

PLANTS 2...building upon Plants 1, the learner conducts and presents research on ornamental woody and herbaceous plants as well as on edible fruits, vegetables, and herbs. As outdoor conditions improve, emphasis returns to plant identification and culture/management as undertaken in Plants 1. PREREQUISITE: 10001159 Plants 1

PRINCIPLES OF SUSTAINABILITY...prepares students to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community.COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

SITE INVENTORY AND ANALYSIS...guides the student through inventory and evaluation of physical, biological, and cultural site resources to determine their potential for enhancement of human activities and their sensitivities to use-impact. Emphasis on information sources, data gathering methods and analysis techniques with projects to develop proficiency. PREREQUISITES: 10001127 Landscape Design Studio Introduction or CONDITION: 190014 Design of Sustainable Landscape-Adv Certificate admissions requirements met

STORMWATER STRUCTURES AND MANAGEMENT...analyzes and implements stormwater retention, detention, and harvesting at various landscape scales from backyard to regional watersheds. Environmental regulation considerations, best management practices, and design approaches will be utilized inproject installations.

SUSTAINABLE HORTICULTURE CAPSTONE EXPERIENCE...undertaking independent and group study across the field of horticulture, the learner implements knowledge and skills, and analyzes progress and results. Proposal scope must be approved by the instructor. PREREQUISITES: 10001140 Advanced Conceptsin Horticulture or 10001140C2 Adv Concepts in Horticulture and COREQUISITE: 10001147 Advanced Greenhouse and Nursery Management or CONDITION: 190014 Design of Sustainable Landscapes admissions requirements met

SUSTAINABLE LANDSCAPE MANAGEMENT...approaches sustainable landscape management from a practical goal based outlook and implements management and supervisory strategies for "triple bottom line" sustainability (Environment, Economic, and Social). PREREQUISITE: 10001172 Landscape Maintenance or CONDITION: 190013 Management of Sustainable Landscapes admissions requirements met

TECHNICAL REPORTING...provides students with the skills to prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. PREREQUISITE: 10831103 Intro to College Wrtg or equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills equivalent

TECHNOLOGY IN HORTICULTURE AND LANDSCAPE...utilizes various programs and technologies for landscape, nursery, greenhouse, small/urban farm, and grounds planning, design, reporting, and monitoring. PREREQUISITE: 10001140 Advanced Concepts in Horticulture and COREQUISITE: 10001144 Sustainable Horticulture Capstone Experience