





TECHNICAL INSTITUTE FOR ENVIRONMENTAL PROFESSIONS

# Academic Year 2023-2024

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# A Note from President Khoury

Unity Environmental University Technical Institute for Environmental Professions Learners,

Welcome to Unity!

By choosing Unity Environmental University you are choosing to embrace a sustainability science education anchored in the liberal arts and enhanced by 21<sup>st</sup> technology. An education that is affordable, flexible, and accessible at an ever-growing university. Your commitment to a Unity education shows you are committed to learning how to be problem solving, culturally competent, critical thinking, skilled, environmental superheroes.

As a learner at Unity Environmental University, you are a part of an organization that is teaming with people who are determined to make a difference. At Unity you will learn from people who have the courage to step out of their comfort zones and embrace risks as they seek to make the world more sustainable with every learner they teach.



Thank you for joining Unity Environmental University, we look forward to working with you as you make your way through your education journey!

If you need help or have questions, please reach out to your Technical Institute for Environmental Professions Recruitment Specialist or Career Coach.

With Pride,

Dr. Melik Peter Khoury Unity Environmental University President

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# **SECTION 1: INTRODUCTION**

## The Unity Environmental University Mission

We are dedicated to delivering quality education and experiences that produce outstanding environmentally competent professionals and inspire individuals from all walks of life to steward sustainable ecosystems.

## The Unity Environmental University Technical Institute Catalog

The Technical Institute for Environmental Professions at Unity Environmental University catalog contains the policies, procedures, and guidelines applicable to the Technical Institute for Environmental Professions (TIEP) Strategic Education Business Unit (SEBU) at Unity Environmental University as reviewed and approved by the Unity Environmental University Technical Institute administrative team. The Unity Environmental University Technical Institute SEBU currently offers credit certificate and Associate degrees, primarily focused on workforce education. All learners in those programs/courses will follow the policies and procedures outlined in this catalog.

Unity Environmental University views the *Technical Institute for Environmental Professions catalog* as the primary contract between the University and the learner. Learners must follow the graduation requirements from the catalog in effect at the time of their matriculation, or learners may elect to fulfill the requirements of any subsequent catalog, provided they were enrolled at the time the catalog was published. In either case, the catalog is to be considered in its entirety; learners may not fulfill part of their program requirements from one catalog and other parts from another catalog. Unity Environmental University reserves the right to change any of the statements made in the catalog by reasonable notice in a supplement or replacement publication.

The Technical Institute for Environmental Professions (TIEP) provides associate degrees and certificate programs in fields that are in demand here in Maine. The Technical Institute is outcome-focused and develops programs designed to prepare learners with the industry-recognized competencies for success. All programs are delivered in a flexible learning format leveraging 2-week terms and a mix of face-to-face and remote instructions at our campus at Pineland Farms in New Gloucester.

By accepting admission to the Technical Institute, learners indicate that they are responsible for adhering to the policies and procedures that govern their education at the Technical Institute. The requirements of the programs at the Technical Institute have been instituted so that learners, faculty, and administrators are guided by a shared set of expectations for education. We sincerely hope that awareness of these requirements allows each learner a fruitful educational experience at the Technical Institute.

## Statement of Accreditation

Unity Environmental University is fully accredited by the New England Commission of Higher Education (NECHE) Commission on Institutions of Higher Education (CIHE). NECHE is located at 3 Burlington Woods Drive, Suite 100, Burlington, MA 01803-4514. NECHE may also

#### UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG be contacted by telephone at (781) 425-7785 or through their website at http://www.neche.org.

## UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG SECTION 2: ADMISSIONS GUIDELINES

## **Undergraduate Admissions Requirements**

The Technical Institute enrolls both first year and transfer learners into undergraduate programs. All learners must have completed high school or earned an equivalent via the GED, HiSET, or homeschooling. As part of the application process, applicants must self-certify that they have earned a high school diploma or equivalent (previously listed). The institution reserves the right to request and require official documents such as transcripts, conduct, and criminal records as a condition of enrollment. All admission decisions are made solely at the institute's discretion influenced by any additional information such as, but not limited to, the potential for success, conduct, and criminal history.

See the Transfer of Credits section below for more details on transferring credits.

## Admissions Requirement for Homeschooled Learners

A homeschool applicant who has completed their home state requirements (equivalent to a diploma) may be required to submit **one** of the following for review:

1) Homeschool transcript, or

2) A portfolio (preferably electronic) demonstrating the applicant has met the requirements equivalent to high school academic completion.

## Readmission to the Institute

Learners enrolled in a program may continue to work toward their credential under the requirements that were in effect at the time they matriculated, providing there have been no breaks of more than twelve (12) months. Learners who have a break of more than twelve months must apply to be reinstated to the Technical Institute program and meet requirements of the catalog in effect at the time they are reinstated. After 12 months of inactivity, learners must contact their Career Coach to express their intent to re-enroll in classes. Learners who had a break in attendance for up to two (2) years due to military service are readmitted to their original program and catalog requirements if the program is still active at the Technical Institute. The University reserves the right to make substitutions for courses that are no longer offered. Learners who withdrew for medical reasons will need to submit documentation that they are cleared to return to the Institute.

## Credit for Prior Learning

The Technical Institute for Environmental Professions encourages learners to explore the many credit for prior learning options available from transferring college credits previously earned, evaluation of military transcripts, standardized exams and the validation of work, to volunteer life experiences through a portfolio.

Learners seeking official credit for prior learning must be enrolled into a TIEP degree or

certificate program and must provide the university with an official transcript or appropriate documentation to review. An unofficial evaluation may take place for applicants to TIEP or for learners with unofficial documentation. Credit will be awarded based on confirming the minimum criteria of grade, score, competency, etc. has been met and matched to course or program requirements. Up to 75% of a program's required credits may be earned through the various prior learning options, with a maximum of 25% of the required credits earned through a combination of Challenge Exams and Portfolios. At TIEP, there is generally no time limitation on awarding credit for prior learning, however there may be exceptions for requirements in particular programs.

While college credit may be earned through these options and count toward a TIEP degree or certificate requirements, the credit and grades will not be included in computing the grade point average and may not transfer to another institution. Requests received for review of prior learning credit for any exams, trainings or courses not listed in the policy should be referred to the Vice President of TIEP for consideration. The final decision regarding the acceptance of all prior learning credit[s] is at the sole discretion of Unity Environmental University.

TIEP doesn't charge any fees for awarding credits but there is a fee for evaluating Challenge Exams and for validating work and life experience through Portfolio Assessment. Any costs associated with courses and exams not offered through TIEP are the responsibility of the learner and paid to the institution/organization offering them.

#### Fees

Portfolio Review: \$200 per course

Challenge Exam: \$100 per exam

Courses that cannot be fulfilled through prior learning credit:

COM 100 Career Pathways

PRO 290 Professional Capstone

#### Credit for Prior Learning Opportunities

**Transfer Credits for Courses:** Transfer credit eligibility requires the post-secondary institution be accredited by a U.S. Department of Education recognized institutional accrediting body. College-level coursework with earned grades of a "C-" and above, or equivalent, may be transferred in to meet program requirements or general electives.

**General Education Block Transfer Credits:** Learners who previously earned an associate or bachelor's degree from an accredited institution of higher education may receive a block transfer for TIEP's 20-credit general education requirement. Learners in specific programs of study may be required to take specific courses to satisfy program requirements.

**American Council on Education [ACE]:** TIEP follow's <u>ACE National Guide</u> recommendations for awarding credit for non-collegiate trainings, certifications, courses, and exams offered by a wide variety of corporate, union, non-profit, educational and government organizations. ACE recommendations include courses take through Outlier, Saylor Academy, Coursera, StraighterLine, Pearson, Distance Learning Systems and more.

**Military Training and Occupations:** Military training and service is eligible for credit based on the recommendation in the <u>ACE Military Guide</u>.

#### Standardized Examinations including:

**College-Level Examination Program [CLEP]:** Credit may be awarded for earning a minimum score of 3.

**DSST:** Credit may be awarded based on meeting the recommendations in the ACE National Guide.

**UExcel:** Credit may be awarded based on meeting the recommendations in the ACE National Guide.

Advanced Placement [AP]: Credit may be awarded for earning a minimum score of 3.

**Foreign Language Achievement Testing Services [FLATS]:** Credit for foreign language proficiency may be earned through successfully passing a <u>Brigham Young University</u> <u>FLATS</u> exam.

**International Baccalaureate [IB]:** Credit may be awarded for earning a minimum score of 5 on Higher Level IB Exams.

**GED Exams:** Credit may be awarded based on meeting the recommendations in the ACE National Guide at the College Ready+ designation.

**Professional Certification or Licensure Examination:** Credits may be awarded for a current professional certification or licensure earned through an exam. As approved, these certification or licensure exams and their corresponding credit will be added to a TIEP Prior Learning Crosswalk. Any certification or licensure not recommended by ACE or listed on TIEP's Prior Learning Crosswalk may be submitted to the Recruitment Specialist or Career Coach for review.

**Institutional Challenge Exams:** Challenge Exams are the equivalent to passing a cumulative, end-of-course examine or a series of comparable exams. Challenge exams are only offered for select courses.

**Apprenticeships:** Credit may be awarded from the successful completion of a Registered Apprenticeship Program from the <u>U.S. Department of Labor's Office of Apprenticeship [OA]</u> or a State Apprenticeship Agency. Successful completion is validated through the nationally-recognized Certificate of Completion of Apprenticeship.

**International [non-U.S.] Transcripts:** Receiving credit for college-level courses completed in another country may be possible. All international transcripts must be evaluated for U.S. course and degree equivalencies. Transcripts in a language other than English must provide a copy translated into English by a certified translator. International higher education transcripts must be evaluated by an approved professional credential evaluation service at the student's expense. The evaluation service must be a member of either the National Association of Credential Evaluation Services [NACES] or the Association for International Credential Evaluation [AICE].

**Portfolio Assessment:** Portfolio assessment is the process of identifying, reflecting on, documenting and evaluating prior learning gained through paid or unpaid employment, self-directed study, non-collegiate coursework or through vocational knowledge, talents, and skills.

The portfolio process provides learners the opportunity to seek college credit for prior learning that cannot be validated through other TIEP Credit for Prior Learning options. Portfolios will be evaluated on a course-by-course basis to determine comparability of competencies to required or elective course learning outcomes. The portfolio assessment is based on the documentation presented demonstrating course competencies or learning outcomes have been met at a C- or better level. Learners seeking to submit a portfolio must first discuss the option with their Career Coach.

Criteria for Challenge Exams and Portfolios of Prior Learning Assessment

- Challenge Exams and portfolios can only be utilized when there is not another method of prior learning assessment available.
- Neither a Challenge Exam nor a Portfolio may be attempted for a course in which the learner is currently enrolled, has previously taken [earned a grade, failed or withdrawn], or has transferred-in from another institution.
- A maximum of 25% of program credits can be earned through a combination of Challenge Exams and Portfolios.
- Learners must have completed at least six credits at TIEP with a minimum cumulative GPA of 2.0 before submitting a Portfolio for review.
- Learners are limited to two challenge exam attempts per course. After two unsuccessful examination attempts, prior learning assessment through Challenge Exam or Portfolio is not an option for the course.
- Each portfolio will be reviewed only once, resubmissions will not be accepted unless minor revisions are requested, and credit determination is final.

## Transfer of Credits from a Quarter System

The Technical Institute recognizes that some learners may transfer in credits earned from a quarter credit system. To convert quarter hours to semester hours, multiply the number of quarter credits earned by 2/3. For example, a course earned at 4.5 quarter credits converts to 3 semester credits.

When the conversion of credit hours completed results in a fraction, the number of credit hours will be rounded up for the benefit of the learner to the nearest half or full semester credit. For example, a course earned at 4 quarter credits converts to 2.67 semester credits, which is rounded up to 3 semester credits. A course earned at 5 quarter credits converts to 3.33 semester credits, which is rounded up to 3.5 semester credits.

### International Transfer Credit

International transcripts must be evaluated by a NACES®- or AICE-approved agency to determine U.S. credit equivalency. The Technical Institute will not consider foreign credits for transfer without the agency evaluation.

## Learner Immunization Policy

State of Maine Requirements

Maine law (20A M.R.S.A. 6358, Chapter 262) states that all public and private post-

secondary institutions in the State of Maine must require, for all certificate and degree seeking learners participating in face-to-face learning, proof of immunization or document immunity against five specific illnesses: diphtheria, tetanus, measles, mumps, and rubella.

Per Maine law, evidence of immunization or immunity can be demonstrated by the following:

- A certificate of immunization from a physician, nurse, public health official, or school health provider who has administered the immunizing agent(s) to the learner must specify the immunizing agent and the date(s) on which it was administered. Secondary school health records may also be accepted as proof of immunization under this rule, in lieu of certificates of immunization, as long as the secondary school health records were compiled and maintained as official documents, were based on certificates of immunization, and state, at a minimum, the month and year that the immunizations was administered.
- 2. Laboratory results or medical records demonstrating immunity will be considered acceptable evidence of meeting the purpose of this requirement. Secondary school health records may be accepted as proof of immunity if they contain copies of the laboratory evidence of immunity.

As of September 1, 2021, the law no longer allows learners to claim religious or philosophical exemptions.

The only exemption to this requirement is for learners enrolled in a distance education program who do not physically attend any classes or programs at a school facility.

Unity Environmental University requires immunization records for all certificate and degree seeking learners where in-person learning is either an option or requirement of the SEBU.

**University-Specific Requirements** 

In addition to the immunization requirements of the State of Maine, Unity Environmental University Enterprise or SEBUs may require additional immunization(s) based on location, program of study, or public health concerns.

## UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG SECTION 3: EXPENSES AND FINANCIAL AID

## Cost of Attendance

<u>Undergraduate courses</u> cost \$250 per credit hour. Books, software, hardware, and other materials are not included in the credit hour cost and must be purchased separately.

## Billing

Learners will be billed for each term after being registered for their courses. All learner accounts must be settled and financial aid in place before the end of the add/drop period. Any outstanding balance will lead to automatic withdrawal from courses. Outstanding balances will impede future enrollment.

## Failure to Pay

Failure to pay bills in full when due may result in revocation of Technical Institute privileges, including but not limited to, issuance of grades and/or transcripts, registration for subsequent terms, participation in graduation ceremonies, and participation in registered classes and examinations. It is imperative that a learner contact Student Financial Services if any charges are to be disputed.

## **Refund Policy**

Technical Institute learners who drop a course, whether they are active or not, before the end of the add/drop period are eligible for a 100% tuition refund for that course. After midnight of the last day of add/drop, learners are no longer eligible for a refund.

If a learner takes no action to drop a course and stops participating during the add/drop period, the institution will take action to withdraw the learner. The learner will be held liable for the total costs associated with the course.

## Fast Track Refund Policy

Learners who are eligible for a refund may use the Fast-Track Refund process to purchase required course materials and educational resources including books and supplies at the start of a term.

Fast-Track refunds are issued electronically by the Business Office and availability of a Fast-Track refund is dependent upon the learner:

- having completed a financial aid package with a refund projected to be on their account.
- being enrolled in direct deposit through the learner portal. If a learner is unable to provide bank information, the learner should be referred to Student Financial Services (SFS). SFS will attempt to determine the barrier. If no ACH solution can be determined, a paper check will be requested by SFS.
- completing the Fast-Track Refund Request Form

## Failure to Participate

Learners who fail to participate in their course(s) within the drop period (as defined by

attending virtually or in-person; or one discussion post, assignment, or engaging with the course recording or content expert) may be automatically dropped from the course.

## **Financial Aid**

The learner's financial need will be determined based on the information provided on the Free Application for Federal Student Aid (FAFSA) online at <u>fafsa.gov</u>. Choose Unity's College code (006858) to ensure that the application data will be transmitted to the Financial Aid Office. It is the learner's responsibility to respond promptly to requests for additional information or clarification concerning the aid application.

## Return to Title IV

Learners receiving any federally sponsored financial aid, such as Federal Pell Grants, or Federal Stafford Loans, are subject to a separate Federal policy pertaining to the amount of those federal funds they may retain when they withdraw from the University during an academic semester. This policy, called The Return of Title IV Funds Policy, prorates available aid based on the amount of the semester completed. Written examples of the refund calculations are available upon request from Student Financial Services, as well as any further information that may be needed pertaining to the refund or return of Title IV Funds process. Whenever applicable refunds are determined and any federally sponsored programs are involved, the following federally prescribed order of refund distribution is required Prescribed by Law and Regulation TOTAL REFUND:

- 1. Unsubsidized Federal Stafford Loan
- 2. Subsidized Federal Stafford Loan
- 3. Federal Perkins Loan
- 4. Federal PLUS Loan
- 5. Federal Pell Grant
- 6. FSEOG
- 7. Other Title IV Aid Programs

## Financial Aid Available for Technical Institute Learners

#### Pell Grant

Matriculated undergraduate learners who complete a FAFSA may be eligible for the Pell Grant. This need-based award does not need to be paid back.

#### Federal Supplemental Education Opportunity Grant

Matriculated undergraduate learners who receive Pell Grant are eligible for this grant based on fund availability. This award is to Pell-eligible learners.

#### The Direct Subsidized Loan Program

Matriculated undergraduate learners enrolled in two (2) or more credit hours per 2-week term may complete a FAFSA for consideration for this loan. The maximum annual award is based on the learner's year in college. The funds will be split equally across all periods of enrollment. The total undergraduate amount a learner may receive is \$23,000.

Repayment on the Subsidized Loan starts no sooner than six (6) months after you graduate

or fall below half-time status. There is a ten-year repayment period and other re-payment options.

#### The Direct Unsubsidized Loan Program

Matriculated undergraduate learners enrolled in two (2) or more credit hours per 2-week term may complete a FAFSA for consideration for this loan. The maximum annual award is based on the learner's year in college and will be split equally across all periods of enrollment. The total undergraduate amount a learner may receive is \$34,500.

The unsubsidized Direct Loan starts to accrue interest after payment to your account. While in college, you can elect to pay interest on an Unsubsidized Loan, or have it added to the principal. Repayment on the Unsubsidized Loan starts no sooner than six (6) months after you graduate or fall below half-time status. There is a ten-year repayment period and other repayment options.

NOTE: Financial Aid is not available for non-degree seeking candidates.

#### **Private Loans**

Private loans may be an option if no other sources of financial aid are available. Unity Environmental University is not permitted to provide counsel about which private loans to choose. For additional information regarding these loans, please visit: <u>http://www.Unity.edu/FastChoice</u>.

## UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG SECTION 4: ACADEMIC POLICIES

## Definition of a Technical Institute Credit

The Technical Institute policy defines one undergraduate credit hour as a semester hour, the standard measure of progress toward a degree at most institutions. For Technical Institute courses, learners will complete the requisite number of competencies aligned to a learning outcome of a standard credit hour. Ultimately, academic credit in the Institute is awarded based upon mastery of competencies.

## **Course Load and Status**

The maximum course load for all <u>undergraduate</u> learners is limited to two (2) credit hours per two-week term. Learners taking four (4) credits per payment period are considered full-time status. To be eligible for financial aid, undergraduate learners must be enrolled in at least two (2) credits per term.

## **Course Registration**

Based on the learner's academic plan, the Career Coach registers the learner for the appropriate courses.

## **Course Cancellation**

No courses in a specific term are guaranteed and the University may cancel courses due to low enrollment and other circumstances prior to a term start. If this occurs, the University will immediately notify the learners to discuss options, and the Career Coach will work to find an appropriate substitution. Any payments made for canceled courses will be refunded or applied to a different course within the University.

## Add/Drop Policy

During the first two (2) calendar days, learners may add or drop courses for the current term. Learners should contact their Career Coach to add or drop a course. Reducing or increasing credit hours during the two add/drop days will impact the tuition and financial aid.

## Attendance/Class Participation

Technical Institute learners will be required to complete an initial assignment dictated by the respective course instructor by 11:59PM on or before the end of the add/drop period. Learners are required to attend at least 50% of the scheduled class meetings for each course in person. During the term, the learner will be required to complete assignments as directed in the syllabus or by the instructor.

To comply with federal financial aid regulation, the Technical Institute is providing the following procedural guidance: A learner is active in a course (or the online portion of a HyFlex, hybrid, or blended course) by participating in class or otherwise engaging in an academic activity.

Examples of such activity include but are not limited to, one or more of the following:

- contributing to an online discussion or text chat session;
- submitting an assignment or working draft; working through exercises;
- taking a quiz or exam;
- participating in, and/or completing a tutorial.

Examples of academic activity do not include:

- logging into online classes/discussions without active participation
- speaking with an instructor or Career Coach to participate in academic counseling or advising.

Academic activity is readily tracked and documented through TIEP's learning management system and information system. If a learner ceases to demonstrate academic activity, but the last active date is after the withdrawal deadline, the learner will be withdrawn from the course. An "F" (failing) grade will be entered on the learner's record.

All learners must be registered for courses to participate in them, and the Technical Institute does not allow learners to audit courses.

## **Extended Absence**

If the learner needs to step away from the course for a time that impacts their ability to make progress towards completion of course requirements, they must immediately communicate with the Career Coach.

The exact reasons need not be revealed to the Technical Institute staff if there is a need for confidentiality. This does not necessarily constitute an "excused absence", relieve the learner of their responsibilities, or change the course expectations.

### **Course Withdrawal**

Learners who wish to withdraw from a course must do so by the deadlines in the academic calendar by emailing their Career Coach. The Technical Institute staff will work with the Registrar's Office to complete the course withdrawal. It is the learner's responsibility to contact Financial Aid to determine any changes based on a course withdrawal. If a learner wishes to withdraw after the withdraw deadline posted on the academic calendar, they will receive an "F" grade instead of a "W" grade. Technical Institute faculty may not give a grade of "W". That grade designation is applied by the Registrar's Office. The effective date of the course withdrawal will be the learner's last date of activity in the LMS.

## Leave of Absence and Time Limitation for Degree Completion

Technical Institute learners will have double the program length to complete the program of study starting from the date of matriculation. For example, a 60-credit Associate degree on a standard path is 30 terms (1.5 years). Learners must complete the program in a maximum of 60 terms (3 years). Learners who do not meet this deadline will be required to reapply for admission and will be subject to current availability of courses and programs, as well as any new program requirements dictated in the catalog in use at the time of readmission.

Learners who wish to stop out for one (1) or more terms should communicate their intentions to their Career Coach. In addition, the learner should discuss the impact on the completion pathway with the Career Coach. In the absence of such communication, the learner may lose

access to email, learner portal, learning management system, and learner services until a new intent to enroll is established.

Any learner who is inactive for more than one calendar year will need to reapply to the Technical Institute. Further, the enrollment will be subject to current availability of courses and programs, as well as program requirements as outlined in the catalog in use at the time of readmission. Extensions with cause may be requested of the VP/Dean of the Technical Institute. The final decision rests with the VP/Dean.

## Withdrawal from the Institute

The process to withdraw from the University is to first contact the Technical Institute Career Coach and complete an electronic *Withdrawal from the Institute* form. Thereafter, the Career Coach will work with the Registrar's Office to process the withdrawal. If the learner chooses to withdraw during the term, all grades for courses in progress of the withdrawal date are recorded as "W" and all relevant offices and instructors will be notified. However, if the learner indicates that they will withdraw at the end of the term, they will receive the grade earned in the course and all future registrations will be cancelled.

## Medical Withdrawal from the Institute

Learners may request a medical withdrawal when an illness or injury occurs that makes it impossible for the learner to continue with classes. A medical withdrawal may be used in response to matters of both physical and mental health. To be recorded as a medical withdrawal, documentation from a licensed medical practitioner must be submitted to the Vice President or Dean of the Technical Institute confirming that the learner would not be able to complete coursework as a result. Medical withdrawals will be dated based on the last date of activity in the LMS. The regular refund policies of the University apply. Medical withdrawals can be recorded up to 10 business days after the end of the impacted term. Any extenuating medical circumstances that fall outside this timeline will be reviewed by the VP/Dean on a case-by-case basis.

In the case of a medical withdrawal, all grades are recorded as "W" and all relevant offices and professors will be notified.

Learners wishing to return after a medical withdrawal must follow the *Readmission to the Institute* policy.

## **Grading Policy**

#### Undergraduate Grading Scale

A learner is considered to have passed the course when they have mastered all the competencies in the course. Mastering all the competencies earns an "A" in the course. If the learner fails the course, they will need to repeat the course.

Grade	Non-CBE Course Equivalent	CBE Course Equivalent
А	(90-100%)	Mastery achieved & passed
В	(80-89.9%)	Mastery/Near Excellence achieved and passing
F	(0-79.9%)	Failing

## W Grade (No credit)

A Withdraw (W) grade is recorded when the learner withdraws in accordance with the Withdrawal Policy listed in this catalog. A "W" grade is not calculated as part of the GPA; however, a "W" grade is counted towards calculating Satisfactory Academic Progress for financial aid.

## I Grade (No credit)

A learner who has earned a passing grade up until the withdrawal deadline may, for extenuating circumstances, request an incomplete grade in the course if they are unable to complete the course by the published course end date.

Incomplete grades may be given only in the following circumstances:

- 60% of all course competencies must be mastered; and
- Extenuating circumstances prevent the learner from completing the required course work; and
- The remaining course work may reasonably be completed prior to the end of the next term

To request an incomplete, the following process must be followed:

- 1. The learner initiates the request by email with their instructor and Career Coach.
- 2. If the learner is qualified for an incomplete, they complete an electronic *Request for Incomplete* form.
- 3. If the incomplete is approved by the Vice President/Dean, the learner will have the entire next term to complete the required work so that all the course competencies are mastered.

Learners may continue to take other courses while completing the requirements for an

incomplete grade. If a learner does not complete the work prior to the incomplete deadline, the course grade will roll over into an "F". Should the learner choose to withdraw from the Technical Institute prior to resolving the incomplete grade, the grade will automatically roll over into an "F", thus impacting the learner's cumulative GPA. Learners who receive an incomplete grade in a course cannot re-register for the course in order to remove the "I".

For financial aid, credits for an incomplete grade are factored into attempted (but not completed) credits for the learner's cumulative completion rate.

An Incomplete may not be used as a shelter from a low grade in the class.

## Calculating Grade Point Average (GPA)

To determine an undergraduate learner's grade point average (GPA), the Technical Institute uses the following system of quality points:

Letter Grade	4.0 Scale
A	4.0
В	3.0
F	0.0

## Change of Final Grade

Except for the grade of "incomplete," final course grades are not changed after submission to the Registrar except to correct an entry error, or in the result of a successful grade appeal by the learner. All grade change requests must be approved by the VP/Dean.

## Appeal of Final Course Grade - Process for Learners

If a learner wishes to appeal their final grade for a course, the following process should be followed:

- 1. If the learner is able to contact the instructor, the learner initiates a conversation about the grade with the instructor.
- 2. After this conversation, <u>or</u> if the learner is unable to contact the instructor, the learner may file a grade change appeal with the VP/Dean of the Technical Institute.
- 3. The grade appeal must be submitted in writing no later than 10 business days after the final grade was submitted.
- 4. The VP/Dean will review the appeal along with any supporting documentation and information provided by the learner and by the instructor to decide on the appeal.
- 5. The VP/Dean's decision will be communicated within 10 business days of the appeal and the VP/Dean's decision is final.

## **Repeating Courses**

If learners repeat a previously completed course, the grades for both the first and subsequent attempt(s) will remain on the learner's transcript and the academic record. However, only the highest grade will be used in computing the cumulative grade point average. Credit can only be earned once for a course, unless specifically stated otherwise in the course description. Courses completed with a grade of "B" or higher may only be repeated once. Learners should be aware that financial aid will cover retaking a previously passed course only once.

## **Class Standing**

Class standing is determined by the number of credits completed by the learner, including those accepted in transfer from other institutions based on the ranges below.

First Year: 0-29 credits Sophomore: 30+ credits

## Academic Standing

Unity Environmental University has a combined Academic Standing and Title IV Satisfactory Academic Progress policy, referred to as the satisfactory Academic Progress (SAP) Policy. Learners are assessed for SAP at least biannually, in alignment with each financial aid payment period – although aid is disbursed each term, the award year is divided into two payment periods. A learner's academic standing and financial aid eligibility may be impacted at the biannual reviews. Additional reviews will be performed for learners in an Academic Warning or Academic Probation status.

#### Review Cycle

**Undergraduate Learners** 

- The biannual reviews will be at the end of each payment period, every 10 completed 2-week terms. A new learner will be reviewed at the completion of their 10th 2-week term (the first payment period) and again at the end of their 20<sup>th</sup> 2-week term taken (the second payment period) and at every 10th completed term after that.
- Learners on Academic Warning will also be reviewed at the end of their eighth term.
- Learners on Academic Probation will be reviewed at the end of each term.

#### Minimum Standards for Satisfactory Academic Progress

- Cumulative Grade Point Average (CGPA): maintaining a minimum cumulative GPA, based on program level:
  - Undergraduate learners: 2.00
- Completion Rate: maintaining the appropriate completion pace, based on program level:
  - Undergraduate learners: 67%
- Maximum Time Frame: mathematically able to complete a degree program in a timeframe of no more than 150% of the program's average length in terms of credits

#### Calculating Minimum Standards for Satisfactory Academic Progress

- Cumulative Grade Point Average: is determined by summing the grade points for Unity courses in all terms and dividing by the total number of credit hours attempted in all terms (total grade points divided by total credit hours = CGPA).
- Completion Rate: the number of credits earned divided by the number of credits attempted. Total attempted credits include the number of credits a learner is enrolled in at the end of the add/drop period each semester, and cumulatively includes all accepted transfer credits. Grades of "I" (incomplete) will be used in this calculation as attempted credits, but not earned credits.
- Maximum Time Frame: examples an Associate degree program with a 60-credit requirement would have, at most, 90 attempted credits covered by financial aid.

### Academic Standing

Learners must meet the minimum standards for SAP at each biannual review. Learners who meet all three components of the minimum standards for SAP are considered in good academic standing. Learners who fall below one or more of the minimum standards for SAP at the first biannual review, and are not already on Academic Probation, will be placed on Academic Warning until the next payment period. Learners on Academic Warning who remain below the minimum standards for SAP at the end of the warning review (10<sup>th</sup> 2-week term for UG) will receive a second notice that they remain on Academic Warning and are in jeopardy of academic suspension and losing financial aid eligibility. Learners on Academic Warning who remain below one or more of the minimum standards for SAP at the second biannual (20<sup>th</sup> 2-week term for UG) review will be placed on Academic Suspension. Learners on Academic Suspension have the right to appeal, requesting their enrollment and financial aid be reinstated due to extenuating circumstances that prevented them from making satisfactory academic progress. Extenuating circumstances include:

- Illness or injury to the learner or close relative; or
- Death of an immediate family member or close associate; or
- Other unusual mitigating circumstances.

To appeal, a learner must submit a letter explaining the circumstances that prevented them from meeting SAP criteria. The appeal must include what has changed that will allow the learner to obtain SAP at the next evaluation and may include any supporting documentation. The SAP Appeals Task Group will review any appeals initiated by a suspended learner and received within the timeframe stipulated in the suspension notification. All appeals must be submitted to <u>registrarsoffice@unity.edu</u>. If an appeal is granted, the learner will be placed on Academic Probation until they meet the minimum standards for SAP. Only in extenuating circumstances should a learner use the same reason for subsequent appeals. The appeal decisions are final. Learners may appeal a maximum of three times as an undergraduate learner and three times as a graduate learner. The fourth suspension instance, a learner will be considered Academically

Dismissed from the University. An Academic Dismissed learner is subject to the University's Dismissal policy. Learners on Academic Probation will be given an Academic Plan, specific to their program level, they must achieve each term while they are working to meet the minimum standards for SAP. Each term, learners on Academic Probation will be reviewed for progress towards meeting the minimum standards for SAP and for meeting the requirements of the Academic Plan. Probationary learners who meet the minimum standards for SAP will be moved to good academic standing.

- Probationary learners who meet the requirements of the Academic Plan yet remain below one or more of the minimum standards for SAP, will remain on Probation until the minimum standards for SAP are achieved. These learners do not need to submit appeals if they are progressing as required in the Academic Plan.
- Probationary learners who don't meet the terms of their Academic Plan and continue to fall below one or more of the three criteria for SAP will be placed on Academic Suspension. These learners will need to submit an appeal to continue their studies and financial aid.

#### Academic Plans for Learners on Probation

Undergraduate learners on Academic Probation must complete all registered courses, each term, with at least a C (no incompletes or withdrawals).

#### The Right to Suspend or Dismiss

The University reserves the right to suspend or dismiss a learner from the University at any time when academic work is unsatisfactory or when conduct is deemed detrimental to the teaching and learning goals of the University community. This suspension or dismissal can be put into place at any time during the academic year and does not require the formal Satisfactory Academic Progress review to have taken place.

## Academic Residency Requirement

#### Academic Residency Requirement

To earn an associate degree, a minimum of 15 credits must be earned directly from the Technical Institute for Environmental Professions and at least 25% of the program credits must be earned through the Technical Institute for a certificate.

### Graduation

#### Application for a Degree

Unity Environmental University confers degrees each term to learners completing their degree requirements. Applications accepted on a rolling basis prior to the conferral of the degree. Upon receipt of the application to the Registrar's office, learners will be billed a \$100

fee. <u>The application and fee must be submitted in order to confer a degree, even if the learner</u> <u>does not plan to attend a commencement ceremony.</u>

Degrees are posted in the information system within two weeks from the last day of a learner's final term, given that the learner has applied for degree conferral. Diplomas will be mailed within thirty (30) days of the conferral date once the academic records are certified and all financial obligations to the University have been resolved.

Participation in a Commencement Ceremony

Unity Environmental University celebrates Commencement with an official ceremony each May. There is a smaller ceremony each December. Associate degree-seeking learners are eligible to participate in a commencement ceremony if they have met all academic requirements for their degree or will be within six (6) credits of completing their degree requirements by the date of the ceremony.

Learners may only participate in one ceremony per earned credential and must participate within one (1) year of degree conferral.

Certificate learners at both the undergraduate and graduate levels are not eligible to participate in a commencement ceremony.

Diplomas are mailed to the learners and are not handed out at the commencement ceremony. Learners participating in the ceremony will receive diploma covers.

Learners who are eligible and wish to participate in a commencement ceremony must:

- 1. Submit an application for degree.
- 2. Have a degree audit completed by the Registrar's office.
- 3. Pay the \$100 fee.

Learners that apply after <u>November 1</u> to participate in December may not have their information published in commencement materials (program, slideshow) or receive regalia prior to the ceremony.

Learners that apply after <u>March 30</u> to participate in May might not have their information published in commencement materials (slideshow) or receive regalia prior to the ceremony. After <u>April 10</u>, they may also fail to appear in the program.

#### **Replacement Copies of Diplomas**

Graduates may submit a request for a replacement diploma through the Registrar's Office. Replacement diplomas shall carry all academic information contained on the original, except that all signatories will be current administrators. Graduates requesting a replacement diploma will be subject to the current fee for such diplomas.

#### **Unclaimed Diplomas**

Unclaimed, undeliverable, or withheld diplomas are retained in the Registrar's Office for a period of (5) five years, after which they may be destroyed. Graduates wishing to replace an unclaimed, destroyed diploma must request a replacement diploma as described above.

Second Associate Degree

A learner who has completed an Associate degree from an accredited institution may pursue a program leading to a second Associate degree at the Technical Institute for Environmental Professions at Unity Environmental University. This includes learners who have graduated with a bachelor's degree from Unity Environmental University. In this case, the learner must complete the following requirements to earn an Associate degree at the Technical Institute:

- 1. Complete the General Education Core
- 2. Complete the program core for the major (credits dependent on major)
- 3. Earn a minimum of 15 credits at the Technical Institute for Environmental Professions
- 4. Maintain a cumulative GPA of 2.00 or higher
- 5. Some programs may require the completion of identified prerequisite courses. If a learner has not completed the course(s) identified in their previous degree, they may be required to take them at the Technical Institute.

## UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG SECTION 5: ACADEMIC PROGRAMS

# Requirements for All Associate Degree Programs

Learners who earn an Associate degree from the Technical Institute for Environmental Professions have completed a minimum of 60 credits. Each Technical Institute of Environmental Professions associate degree program is comprised of three elements:

- General Education Core, including Environmental core (20 credits; requirements are program-specific): The goal of the general education curriculum of the Technical Institute is to provide learners with opportunities to develop and demonstrate competencies that are consistent with a college education and of value in professional, civic, and personal contexts. Moreover, these outcomes should provide the foundation for successful engagement in a broad range of environmental professions and civic undertakings. Because TI degrees are offered at the Associate level, the general education curriculum must also provide adequate foundational skills to support learners who choose to pursue further education (e.g. bachelor's degrees).
- Major Core (30 34 credits; requirements are program-specific): The major core courses enable learners to develop and apply core knowledge and skills specific to each program.
- 3. Electives (6-10\* credits): The number of elective credits in each program is equal to the total number of program-required credits minus the sum of the General Education Core and the Major Core credit requirements. Learners can enroll in any of the undergraduate courses in the Technical Institute for Environmental Professions catalog that are not already required by their program to fulfill the remaining credits needed for degree completion.

\*Programs with external accreditations may be exempt from this requirement.

General Education Learning Outcomes: Learners will achieve the following outcomes through completion of the requirements within the General Education Core:

- 1. Communicate effectively within professional contexts.
- 2. Collaborate effectively with diverse colleagues and clients.
- 3. Identify and use reliable sources to acquire new information and inform decisions related to sustainability.
- 4. Interpret and accurately summarize quantitative information.
- 5. Recognize and consider social, economic, environmental, and ethical dimensions of decisions in professional and/or civic contexts.

#### CATALOG

## ASSOCIATE DEGREE PROGRAMS

# **Data Analytics**

With a renewed emphasis on combating global climate change, the data analytics field is expected to grow at a rate of 20% over the next decade, according to the Bureau of Labor Statistics. Much of the climate change research and mitigation strategies rely on adequate and accurate data and data interpretation. Climate change is the biggest threat facing the planet for current and future generations. Climate change impacts everything from marine biology to food systems to human health. One of the most powerful tools in the fight against climate change is data. Data Analytics uses a variety of tools – from machine learning to data visualization – to present an accurate picture of the current health of the planet and predict the future.

Upon completion of the Data Analytics program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Articulate the connection between data and the environmental professions and the importance of data in the field.
- 2. Demonstrate the ability to think critically in making decisions based on data and deep analytics.
- 3. Demonstrate the ability to use industry relevant data analysis tools such as Microsoft Excel, Python, and more.
- 4. Demonstrate the ability to communicate the result of the data analysis to relevant stakeholders.
- 5. Organize and retrieve data using tools such as MongoDB and SQL.
- 6. Create meaningful reports in varying formats that portray the results of the data analysis.
- 7. Identify and discuss security and ethical issues in dealing with data.

#### General Education Core

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21<sup>st</sup> Century Communication Skills

COM 105 Write Right!

COM 201 Research Applications

COM 205 Focus on Sustainability

MAT 101 Foundational Algebra

ENS 101 Our Blue Planet

ENS 201 World Cultures

GIS 101 Introduction to Geographical Information Systems for Environmental Professionals

#### Program Core

DAT 101 Introduction to Data Analytics

DAT 201 Database Basics

DAT 203 SQL Demystified

DAT 205 Introduction to Data Science

DAT 211 Writing Reports

MAT 201 Don't Step in the Bulls#it! Workplace Statistics

PGR 101 Fundamentals of Coding

PGR 105 Coding for Data Analytics

PRO 201 Professional Ethics

PRO 290 Professional Capstone

20 credits of unrestricted electives

Graduation Requirements: A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

## **Renewable Energy**

Renewable energy helps in the fight against climate change by aiding in the conservation of natural resources. The use of non-renewable resources, such as fossil fuels, hurts the environment. The world is facing unprecedented energy problems and the solution is to develop alternate energy resources. Renewable energy has rapidly become a major area of focus globally as the world seeks cleaner sources of energy. Renewable energy systems need to be maintained and designed.

According to the Bureau of Labor Statistics (BLS), the job outlook for Renewable Energy related jobs is bright. While there is no one field named Renewable Energy, a credential in Renewable Energy allows the graduate to work in related areas such as Wind Turbine Technology, Solar Power Technology, Geothermal Technician, Energy Auditor, among others. Employment in these fields is expected to grow at an average rate of 15% from 2020-2030 with an explosive growth rate of 68% expected for Wind Turbine Technicians. The BLS projects approximately 10,000 jobs per year in all technician level jobs. The salaries in this field are respectable. As an example, according to ONET Online, the median salary of a Wind Turbine Technician national is \$56,260 with a high end of approximately \$80,000 per year.

Upon completion of the Renewable Energy program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Discuss the environmental challenges that necessitate the use of renewable energy systems.
- 2. Demonstrate an understanding of creating and maintaining safe working environments in the renewable energy field.
- 3. Explain the function and design of sustainable energy systems such as solar, wind, hydroelectric, and geothermal technologies.
- Discuss sustainable alternatives (including smart grid) to unhealthy environmental practices and the benefits of these alternatives to business and society.
- 5. Discuss the role of technology in the field of renewable energy.

#### General Education Core

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21st Century Communication Skills

COM 105 Write Right!

COM 201 Research Applications

COM 205 Focus on Sustainability

MAT 101 Foundational Algebra

ENS 101 Our Blue Planet

ENS 201 World Cultures

GIS 101 Introduction to Geographical Information Systems for Environmental Professionals

Program Core

ENS 110 Introduction to Environmental Studies

ITS 103 Practical Applications of IoT

ITS 201 Introduction to Robotics

PRO 201 Professional Ethics

PRO 290 Professional Capstone

REN 101 Renewable Energy I

REN 103 Renewable Energy II

REN 201 Business Applications for Renewable Energy

REN 207 Renewable Energy & Safety

22 credits of unrestricted electives

Graduation Requirements: A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

## Software Development

It is a fact that technology is universal – from the alarm that jolts you out of your sleep in the morning to electric cars to rockets that propel people into outer space. All these systems require software, which Time Magazine described in 1984 as the "wizard in the machine". Software can aid scientists, organizations, and individuals in preserving the environment and battling climate change. Renewable energy systems such as wind turbines and solar farms rely on technology to run them. Artificial intelligence systems and machine learning systems are aiding in the fight against climate change with satellite imagery and data, smart cities, smart homes, and smart transportation to name a few. Database systems store colossal amounts of information on the environment which can then be used to mitigate the impact of climate change.

Software Development is essential to the study of the environment as software developers create tools that enable environmental scientists and data analysts to conduct environmental research. In addition, software developers create monitoring tools and apps that assist in studying the environmental impact of everyday activities.

The employment outlook for software developers is very bright according to the Bureau of Labor Statistics and ONET online. The wages for software developers are high, both in Maine and nationally.

Our Software Development degree is unique in Maine – delivered in a highly flexible (HyFlex) format, leveraging both live in-person and online options, from our brand-new high-tech classrooms in New Gloucester, Maine.

Upon completion of the Software Development program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Apply a problem-solving process to solve software problems.
- 2. Demonstrate an understanding of program logic by creating flowcharts and structure charts.
- 3. Demonstrate an understanding and an application of the Open Systems Interconnection (OSI) Model, layers, and functions as well as operating systems and sub-systems.
- 4. Design and code syntactically and logically correct operational programs using an assigned programming language.
- 5. Manage code and code versions using a software repository.
- 6. Discuss the ethical and societal issues related to all professions including software development.
- 7. Demonstrate an understanding of the software development process and software process management.
- 8. Demonstrate an introductory understanding of digital devices and digital logic.

#### **General Education Core**

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21st Century Communication Skills

COM 105 Write Right!

COM 201 Research Applications

COM 205 Focus on Sustainability

MAT 101 Foundational Algebra

ENS 101 Our Blue Planet

ENS 201 World Cultures

GIS 101 Introduction to Geographical Information Systems for Environmental Professionals

Program Core

- DIG 101 Digital Devices and Digital Logic
- ITS 101 Fundamentals of Networking
- ITS 203 Operating Systems
- PGR 101 Fundamentals of Coding
- PGR 109 Programming I
- PGR 209 Programming II
- PGR 215 Data Structures I
- PGR 217 Data Structures II
- PRO 201 Professional Ethics
- PRO 290 Professional Capstone
- 20 credits of unrestricted electives

Graduation Requirements: A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

## Sustainability Studies

The Associate in Applied Science Degree in Sustainability Studies is designed for learners with an interest in addressing environmental concerns and safeguarding the environment for future generations, through promoting environmental management practices in their lives, communities, and careers. Learners will investigate the social, political, scientific and historical aspects of environmental issues. This program will provide learners with the knowledge, skills, and analytical tools needed to work on solutions to environmental challenges and to think critically and creatively about sustainable strategies to protect the environment. Learners will have the chance to explore the broad career opportunities in this field.

Upon completion of the Sustainability Studies program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Identify and analyze complex environmental issues, recognizing diverse stakeholder perspectives.
- 2. Discuss the natural environment as a system and how human activity affects that system.
- 3. Explain the interconnectedness and multifaceted nature of environmental issues.
- 4. Articulate informed opinions to environmental issues that contribute to sustainable approaches to promote resilient communities.

#### General Education Core

BIO 100 Foundations of Biological Science

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21st Century Communication Skills

COM 105 Write Right!

COM 201 Research Applications

COM 205 Focus on Sustainability

ENS 101 Our Blue Planet

ENS 201 World Cultures

Any Math Course

#### Program Core

BIO 101 Introduction to Biodiversity, Ecology, and Evolution

ENS 110 Introduction to Environmental Studies

GIS 101 Introduction to Geographical Information Systems for Environmental Professionals

**PRO 201 Professional Ethics** 

PRO 290 Professional Capstone

**REN 101 Introduction to Renewable Energy** 

REN 201 Business Applications for Renewable Energy

26 credits of unrestricted electives

Graduation Requirements: A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

# **Urban Agriculture**

In the Associate of Applied Science in Urban Agriculture, learners will focus on urban farming, practiced by 10% of the global populations. Learners will study the various forms of urban farming along with the benefits and challenges of each form. In addition, learners will explore the environmental impact of urban farming. This inter-disciplinary degree will also include the business aspects of farming to include farm management, marketing, and accounting.

Upon completion of the Urban Agriculture program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Demonstrate an understanding of the factors that influence urban farming including environmental, social, economic, and regulatory.
- 2. Identify and describe the properties of, and threats to, urban farm soil and plants.
- 3. Explore various urban farming infrastructures and the benefits/challenges of each one.
- 4. Describe the salient characteristics of a functional management and marketing plan for an urban farm.
- 5. Explain the broader domestic, global, social, and economic impacts of urban agriculture.

General Education Core

BIO 101 Introduction to Biodiversity, Ecology, and Evolution

CHE 101 Foundations of Chemistry

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21st Century Communication Skills

COM 105 Write Right!

- COM 201 Research Applications
- COM 205 Focus on Sustainability
- ENS 101 Our Blue Planet
- MAT 201 Don't Step in the BullS#it! Workplace Statistics

Program Core

AGR 101 Introduction to Commercial Urban Agriculture

AGR 103 Urban Agriculture Systems

AGR 105 Soil Science I

AGR 107 Plant Nutrition

- AGR 109 Plant Diseases
- AGR 203 Plant Lifecycle
- AGR 205 Soil Science II

AGR 207 Weeds and Pest Management

PRO 201 Professional Ethics

PRO 290 Professional Capstone

20 credits of unrestricted electives

Graduation Requirements: A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

#### CATALOG

# Veterinary Care and Management

The Associate of Applied Science in Veterinary Care and Management degree prepares learners for various opportunities in the expanding veterinary health, service, and associated industries. Learners will be exposed to animal care, veterinary study, and a focused study of veterinary office management, micro and small business entrepreneurship, animal-related eco-tourism, and the surrounding regulatory landscape. This inter-disciplinary degree equips learners to be employed in the veterinary industry or start their own small business related to veterinary services.

Upon completion of the Veterinary Care and Management program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Demonstrate an understanding of commonly used veterinary terminology, animal handling skills, and safety practices in a veterinary medical setting.
- 2. Demonstrate computer and information fluency integrated at the intersection of veterinary medicine and business.
- 3. Describe the applicable laws and cite ethical codes in humane veterinary patient care.
- 4. Demonstrate an understanding of normal and abnormal domestic animal behavior as well as strategies for behavior modification.
- 5. Apply the knowledge of veterinary nursing principles in managing the care of animals.
- 6. Demonstrate an understanding of the various aspects of running a small and micro business including managing people, accounting, and marketing.
- 7. Apply the applicable state and federal requirements when planning a business.
- 8. Discuss the importance of ethical business practices.

General Education Core

BIO 100 Foundations of Biological Science

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21<sup>st</sup> Century Communication Skills

COM 105 Write Right!

COM 201 Research Applications

COM 205 Focus on Sustainability

ENS 101 Our Blue Planet

ENS 201 World Cultures

MAT 101 Foundational Algebra

#### Program Core

ACT 101 Small Business Accounting

BUS 101 Managing a Small or Micro Business

#### CATALOG

MKT 101 Marketing and Sales of the Small and Micro Business

PRO 201 Professional Ethics

PRO 290 Professional Capstone

VCM 101 Animal Behavior

VET 101 Fundamentals of Vet Care I

VET 103 Fundamentals of Vet Care II

VET 105 Patient Management

VET 115 Medical Nursing and Preventative Medicine I

20 credits of unrestricted electives

Graduation Requirements: A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

# Veterinary Technology

Are you passionate about working with animals? Do you want to gain the skills necessary to be an effective veterinary care professional? Would you like to study vet tech in a flexible, yet supportive, environment with live classes and academic support? If so, we have the program for you! Our Veterinary Technology (VT) program provides an intensive study of the skills and knowledge needed to excel as a Veterinary Technician. Being fully competency-based means that we ensure you have not only completed coursework but equally important have mastered all skills and materials taught, giving you a competitive edge when entering the workforce. Veterinary technology careers in Maine are projected to grow 12% from 2020-2030 and this program is designed to prepare learners to thrive working in the field. Our Veterinary Technology program culminates in an Associate of Applied Science degree.

Our Veterinary Technology program is unique in Maine – delivered in a highly flexible (HyFlex) format, leveraging both live in-person and online options, from our brand new high-tech classrooms in New Gloucester, Maine.

Upon completion of the Veterinary Technology program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Demonstrate oral, non-verbal, and written communication and critical problemsolving skills within a veterinary medical setting.
- 2. List commonly used veterinary terminology as related to the profession and to animal anatomy and physiology.
- 3. List applicable veterinary profession laws, cite ethical codes in humane animal patient care, and best practices for handling animals in the clinical setting.
- 4. Administer medication and treatments to animal patients while following safety guidelines.
- 5. Integrate all aspects of animal patient management for common surgical procedures and therapies in a variety of species.
- 6. Demonstrate proper techniques for sample collection, handling, storage, and analyzation of various laboratory samples and specimens.
- 7. Capture diagnostic radiographic images with accuracy.
- 8. Apply the clinical knowledge and skills necessary to function within the scope of practice of a Licensed Veterinary Technician.
- 9. Execute the Essential Skills dictated by the American Veterinary Medical Association's Committee on Veterinary Technician Education and Activities (AVMA-CVTEA).

General Education Core

BIO 100 Foundations of Biological Science

CHE 101 Foundations of Chemistry

COM 100 Career Pathways

COM 101 Digital Fluency and Information Literacy

COM 102 21<sup>st</sup> Century Communication Skills

COM 105 Write Right!

COM 201 Research Applications

COM 205 Focus on Sustainability

ENS 101 Our Blue Planet

MAT 101 Foundational Algebra

#### Program Core

VET 101 Fundamentals of Vet Care I

VET 103 Fundamentals of Vet Care II

VET 105 Patient Management

VET 107 Animal Anatomy for VT I

VET 109 Animal Physiology for VT I

VET 111 Animal Anatomy for VT II

VET 113 Animal Physiology for VT II

- VET 115 Medical Nursing and Preventative Medicine I
- VET 117 Medical Nursing and Preventative Medicine II w/CCE

VET 119 Microbiology

- VET 201 Clinical Pathology I w/CCE
- VET 203 Clinical Pathology II w/CCE
- VET 205 Veterinary Imaging and Radiology I w/CCE
- VET 207 Veterinary Dentistry w/CCE
- VET 209 Pharmacology for VT I
- VET 211 Pharmacology for VT II
- VET 213 Clinical Large Animal w/CCE
- VET 215 Clinical Small Animal w/CCE
- VET 217 Anesthesiology for VT I w/CCE
- VET 219 Anesthesiology for VT II w/CCE
- VET 221 Surgical Nursing for VT I w/CCE
- VET 223 Surgical Nursing for VT II w/CCE

Graduation Requirements: A minimum of 64 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.

# CERTIFICATE PROGRAMS

# **Urban Agriculture**

Research suggests that an increased focus on urban agriculture may be critical to our survival and a crucial adaptation to climate change. According to the United Nations Food and Agriculture Organization (UNFAO), almost 10% of the global population practices urban farming. Urban farms include vertical farms, hydroponic farms, aquafarms, urban beekeeping, and much more. Urban vegetation helps mitigate the effects of the warming planet. In addition, urban agriculture may be the key to feeding the planet. Urban farms include small individual farms and large operations such as Springdale Farms in Austin, Texas and Ranier Beach Urban Farm in Seattle, Washington.

According to the Bureau of Labor Statistics (BLS), the job outlook for agriculture and agriculture-related jobs remains bright. The agency estimates an additional 78,000 jobs to be added between 2020 and 2030 and an average annual growth rate of 9%. In addition, new research espouses the sustainability benefits of urban agriculture. The salaries in this field depend on the particular area of agriculture chosen.

Our Urban Agriculture certificate is unique in Maine – delivered in a highly flexible (HyFlex) format, leveraging both live in-person and online options, from our brand new high-tech classrooms in New Gloucester, Maine.

Upon completion of the Urban Agriculture Certificate program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Demonstrate an understanding of the factors that influence urban farming including environmental, social, economic, and regulatory.
- 2. Identify and describe the properties of, and threats to, urban farm soil and plants.
- 3. Explore various urban farming infrastructures and the benefits/challenges of each one.
- 4. Describe the salient characteristics of a functional management and marketing plan for an urban farm.
- 5. Explain the broader domestic, global, social, and economic impacts of urban agriculture.

#### Certificate Requirements:

24 credits

2.00 minimum cumulative undergraduate-level grade point average

Program Core

AGR 101 Introduction to Commercial Urban Agriculture

AGR 103 Urban Agriculture Systems

AGR 105 Soil Science I

AGR 107 Plant Nutrition

- AGR 109 Plant Diseases
- AGR 111 Urban Farm Management I
- AGR 203 Plant Lifecycle
- AGR 205 Soil Science II
- AGR 207 Weeds and Pest Management

AGR 209 Sustainability Practices in Urban Farming

AGR 211 Urban Farm Management II

AGR 215 Case Studies in Urban Farming

# Veterinary Assistant

The Veterinary Assistant certificate program prepares learners to work in a veterinary office as a Veterinary Assistant. In this program, learners study commonly used veterinary terminology and salient practices for the care of domestic animals. Further, this certificate enables learners to recognize the signs and symptoms of common illnesses in domestic animals as well as learn to analyze and control animal behavior. In addition. Learners will follow the best practices for sterilizing instruments for surgical prep and prepare samples on slides for observation. This certificate prepares learners to handle the everyday business tasks in a veterinary office, including business and digital functions.

Upon completion of the Veterinary Assistant Certificate program, learners will be able to demonstrate the following verifiable outcomes:

- 1. Demonstrate oral, non-verbal, and written communication and critical problemsolving skills within a veterinary medical setting.
- 2. Demonstrate an understanding of commonly used veterinary terminology, animal handling skills, and safety practices in a veterinary medical setting.
- 3. Demonstrate an understanding of normal and abnormal domestic animal behavior as well as strategies for behavior modification.
- 4. Apply the knowledge of veterinary nursing principles in managing the care of animals.
- 5. Demonstrate an understanding of the various aspects of running a small and micro business including managing people, accounting, and marketing.

Certificate Requirements:

16 credits

2.00 minimum cumulative undergraduate-level grade point average

Program Core

BUS 101 Managing a Small or Micro Business

COM 102 21<sup>st</sup> Century Communication Skills

VCM 101 Animal Behavior

VET 101 Fundamentals of Vet Care I

VET 103 Fundamentals of Vet Care II

VET 105 Patient Management

VET 115 Medical Nursing and Preventative Medicine I

VET 225 Telehealth in Veterinary Medicine

# UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG SECTION 7: COURSE DESCRIPTIONS

# ACCOUNTING COURSES

# ACT 101 Small Business Accounting

In this course, learners will be introduced to the basic principles of financial accounting and the accounting process in a small business. Learners will study transaction analysis, asset and equity accounting, financial statement preparation and analysis, and presenting financial results to external stakeholders. Learners will be introduced to resources for small business taxation. Credits: 2

Prerequisites: None

# URBAN AGRICULTURE COURSES

# AGR 101 Introduction to Commercial Urban Agriculture

This course examines the role of commercial urban agriculture in environmental and food sustainability. Learners will investigate the urban environment as well as examine the social and economic benefits of urban agriculture. In addition, learners will explore the growth of urban agriculture as a career field.

Credits: 2

Prerequisites: None

## AGR 103 Urban Agriculture Systems

In this course, learners examine the various urban agriculture systems to include vertical, rooftop, greenhouses, a-go-grow, sky farms, and hydroponics. Learners will examine commercial installations of these systems.

Credits: 2 Prerequisites: AGR 101

## AGR 105 Soil Science I

In this course, learners will get an introduction to the soils, including the chemical, physical, and biological properties of soils. In addition, learners will examine the role that soil plays in the environment as well as a medium for plant growth and as a natural recycling system. Credits: 2

Prerequisites: None

### AGR 107 Plant Nutrition

In this course, learners will cover the basic concepts and principles of plant mineral nutrition. In addition, learners will examine common nutritional deficiencies in urban crops and the solutions. Credits: 2 Prerequisites: None

AGR 109 Plant Diseases

In this course, learners study the threats urban farms face from toxins, bacteria, and invasive species of plants. Learners will recognize how to examine a plant and identify the disease markers. Learners also devise remedies to bring the plants back to health. Credits: 2

Prerequisites: None

# AGR 111 Urban Farm Management I

In this course, learners will focus on the management practices of urban farming infrastructures such as vertical farms and greenhouses, among others.

Credits: 2

Prerequisites: None

# AGR 203 Plant Lifecycle

In this course, learners identify plants that are best suitable to urban agriculture, examine how plants grow and propagate, and predict how the urban environment impacts plant growth. Credits: 2

Prerequisites: AGR 103

## AGR 205 Soil Science II

In this course, learners will examine the role of soil as a habitat and an ecosystem for beneficial organisms. In addition, learners will explore the use of water as a substitute for soil in urban farming including water habitats.

Credits: 2

Prerequisites: AGR 105

## AGR 207 Weeds and Pest Management

Learners examine proactive and reactive strategies to weeds and pests. Learners gain the knowledge of various tools and methods of pest and weed control. Learners weigh the benefits and challenges of each method/tool for weed and pest management.

Credits: 2 Prerequisites: None

# AGR 209 Sustainability Practices in Urban Farming

In this course, learners examine ways to make their urban farm more self-sustainable. Concepts include composting and recycling of organic waste, conserving water, water management and irrigation, and methods of conserving energy.

Credits: 2

Prerequisites: None

## AGR 211 Urban Farm Management II

Learners explore the principles behind forming a business plan, implementing marketing practices, ensuring post-harvest food safety/handling, and distribution/transportation of crops. Credits: 2

Prerequisites: None

# AGR 215 Case Studies in Urban Farming

This discussion-based course covers a variety of case studies in urban farming. Learners will discuss up-and-coming technology, urban farming successes, and learn from others' mistakes. Credits: 2

Prerequisites: None

# **BIOLOGY COURSES**

# **BIO 100 Foundations of Biological Science**

This course introduces the learner to key principles of biology: evolution, systems, energy, matter, cellular structure, and function. In addition, learner will study the scientific process. Credits: 2

Prerequisites: None

# BIO 101 Introduction to Biodiversity, Ecology, and Evolution

This course is a survey of biological diversity. Learners will study foundational ecological concepts in a broader evolutionary framework and discuss how specific human activities disrupt ecosystems and pose a threat to local and global biodiversity. Credits: 2 Prerequisites: None

# **BUSINESS COURSES**

# BUS 101 Managing a Small or Micro Business

This course introduces the learner to the important concepts of managing a small business including social and legal considerations while running a small business. The course also includes modules on supervising employees, delegating work, motivating, and retaining employees. Credits: 2

Prerequisites: None

# CHEMISTRY COURSES

# CHE 101 Foundations of Chemistry

This course covers the nature of matter and the changes it undergoes. Concepts covered include dimensional analysis, the structure of atoms, chemical equations and stoichiometric calculations, properties of solutions, gas, and laws of matter. Credits: 2 Prerequisites: None

# COMMUNICATION COURSES

# COM 100 Career Pathways

This course will provide learners with the competencies to be successful as a learner in a collegiate environment through an exploration of the policies, procedures, support systems, and learning success strategies. Further, this course will enhance learners' understanding of the importance and use of technology across the disciplines and introduce learners to a baseline framework of career exploration.

Credits: 2

Prerequisites: None

# COM 101 Digital Fluency and Information Literacy

Learners will develop basic digital skills necessary to be productive citizens and participants in the workforce. They will learn to select and use productivity, multimedia, and Web tools to find and represent information, as well as how to identify bias and discern reliable sources. They will learn how corporations gather and use data to influence human behavior and how to protect their own personal data when using digital devices. Learners will also demonstrate a use of a productivity suite such as Microsoft Office to include word processing, spreadsheets, databases, and presentation software.

Credits: 2

Prerequisites: None

# COM 102 21<sup>st</sup> Century Communication Skills

Learners engage with various means of communication and create audience and culturally appropriate materials. Using the principles of storytelling, learners use techniques such as persuasive arguments, clear and concise delivery, and evidence-based reasoning. Through the lens of pro-environmental behavior, learners produce artifacts such as memos, social media posts, reports, and discussion posts.

Credits: 2

Prerequisites: None

## COM 105 Write Right!

In this course learners will be introduced to various writing formats frequently used in professional settings. They will learn conventions for organizing and communicating ideas using words and images within the context of technical reports, e-mails, and other business communications.

Credits: 2 Prerequisites: None

## COM 201 Research Applications

In this course learners will pick an environmental topic of interest to them, conduct research, and write a complete report on the research. This course may involve work within a team. Credits: 2

Prerequisites: None

## COM 205 Focus on Sustainability

In this course, learners will explore a sustainability issue. Within this context, they will characterize environmental, economic, and social dimensions of complex sustainability problems. Learners will apply the research techniques acquired in the research applications

course and draw from reliable resources to propose and/or critique potential solutions. This course may involve working within a team.

Credits: 2

Prerequisites: COM 102, COM 105, COM 201

# DATA ANALYTICS COURSES

# DAT 101 Introduction to Data Analytics

This course is an introduction to the importance of the data analytics field in the study of the environment. In this course, learners will use Microsoft Excel including Excel functions, pivot tables, and macros to conduct basic data analyses. Credits: 2

Prerequisites: None

# DAT 201 Database Basics

This course is an introduction to the SQL language and the fundamental concepts of relational databases. Learners will explore how SQL is used to manipulate, sort, and retrieve data. Learners will create simple SQL queries.

Credits: 2 Proroquisitos: N

Prerequisites: None

# DAT 203 SQL Demystified

Learners will employ techniques to create SQL statements, tables, and reports. This course will delve into the basics of Mongo DB and the key differences between using SQL and NoSQL. Creating and curating reports is a key learning activity in this course.

Credits: 2

Prerequisites: DAT 201

## DAT 205 Introduction to Data Science

In this course, learners use data cleaning and other techniques to explore, process, and prepare data. Further, using statistical methods and visualization tools, learners create a data model to discover patterns, relationships, and trends in data. Credits: 2

Prerequisites: MAT 201

## DAT 207 Business Intelligence Analytics

In this course, learners gain a fundamental understanding of predictive analytics to improve business performance. Emphasis will be placed on data relationships and building predictive models based on cleansed, processed data. Learners will be introduced to PowerBI for building models.

Credits: 2 Prerequisites: MAT 201

# DAT 209 Data Visualization

In this course, learners will use industry-standard tools such as Tableau and PowerBI to build dynamic, interactive dashboards and visualizations from raw data. Learners will manage, sort, group data, and build stories using the data. All dashboards and visualizations will be displayed through the GitHub site.

Credits: 2 Prereguisites: None

# DAT 211 Writing Reports

This course focuses on a critical part of data analytics: writing meaningful reports. During the writing process, learners will formulate the questions, lay out the data evidence, and draw conclusions from the data.

Credits: 2 Prereguisites: None

# DAT 213 Data and Information Security

In this course learners will examine the key principles data and information security, data ownership, and consent. The course also contains a module focused on domestic and offshore legal requirements related to data privacy including GDPR (EU) and FERPA (USA), among others. Credits: 2

Prerequisites: None

# DAT 215 Ethics in Data Analysis

This discussion-based seminar course examines ethical, privacy, and fairness issues in data analytics including biases introduced by artificial intelligence systems. Credits: 2 Prerequisites: None

# DIGITAL LOGIC COURSES

# DIG 101 Digital Devices & Digital Logic

This course builds on the concepts learned in Practical Applications of IoT. Learners explore the relationship between digital and analog waves. In addition, learners will explore Boolean algebra and numbering systems. The course provides an introduction to logic gates.

Credits: 2

Prerequisites: ITS 103

## DIG 103 Electric Power: DC Circuits

This course covers the basics of direct current (DC) circuity, including the concepts needed to measure/calculate current, voltage, and resistance in a variety of circuit configurations. Credits: 2 Prerequisites: None

DIG 105 Electric Power: AC Circuits

This course covers the basics of alternating current (AC) circuity, including the concepts and theorems needed to analyze AC circuits in real life applications. Learners will make predictions about resistor, inductor, and capacitor combinations in electric currents. Credits: 2

Prerequisites: None

# **DIG 201 Applications of Circuits**

In this course, learners explore electronic circuits to store and manipulate data. The course also covers solid state machines, digital systems analysis, and troubleshooting techniques. Credits: 2

Prerequisites: DIG 103, DIG 105

### **DIG 203 Semiconductors**

In this course, learners will investigate analog semiconductor devices and circuits. This course emphasizes installing, diagnosing, and repairing electronic circuit systems.

Credits: 2

Prerequisites: None

### **DIG 205 Digital Circuits**

In this course, learners apply the concepts of digital logic to gates, flip-flops, timers, counters, decoders, encoders, multiplexers, and demultiplexers.

Credits: 2 Prerequisites: DIG 101

# **ENVIRONMENTAL STUDIES COURSES**

# ENS 101 Our Blue Planet

This course examines the most serious environmental and sustainability challenges facing the planet today. This course explores global action in response to the man-made climate disasters. In addition, the course covers the human toll of a changing climate. Credits: 2

Prerequisites: None

# ENS 110 Introduction to Environmental Studies

This course provides an introduction to the interdisciplinary work of environmental studies by providing historical background and examining options for action using tools from a variety of perspectives. This course will cover a broad range of environmental issues in order to lay the foundation for the understanding of complex environmental issues and the interactions between human behavior and the natural environment. Credits: 2

Prerequisites: None

### ENS 201 World Cultures

This course picks up where "Our Blue Planet" leaves off and examines more deeply the contemporary environmental issues facing our planet. Learners will examine the human-nature

relationship in different cultures and how these beliefs shape behaviors that contribute to environmental problems or their solutions. Credits: 2

Prerequisites: ENS 101

# GEOGRAPHICAL INFORMATION SYSTEMS COURSES

# GIS 101 Introduction to Geographical Information Systems for Environmental Professionals

This course introduces learners to the basic principles and techniques of Geographical Information Systems (GIS) and provides opportunities for learners to generate, store, and transform datasets using GIS software. Learners will explore how GIS technologies are used in various environmental professions.

Credits: 2

Prerequisites: None

# INFORMATION TECHNOLOGY COURSES

# ITS 101 Fundamentals of Networking

This course introduces the learner to network fundamentals using the OSI (Open Systems Interconnection) model and TCP/IP (Transmission Control Protocol/Internet Protocol) suite, fundamentals of Ethernet, IP addressing, and building simple LANs (Local Area Networks). Credits: 2

Prerequisites: None

# ITS 103 Practical Applications of IoT

This course introduces the learner to the Internet of Things (IoT) and the practical applications of IoT in all aspects of life, particularly in the world of renewable energy. In addition, learners will gain basic knowledge of the principles of networking, computing, and problem-solving. Credits: 2

Prerequisites: None

## ITS 105 Computer Hardware

This course provides the learner essential skills to service, maintain, upgrade, and optimize computer systems' hardware and related devices. A discussion of servers is included in the course as well as a discussion of the A+ certification exam. Credits: 2 Prerequisites: None

## ITS 107 Ethics in Computing

This course covers topics in ethics as related to information technology. Learners will discuss topics such as ethical standards, intellectual property, freedom of speech, privacy, and public policy. Learners will also discuss the moral and social implications of computing. Credits: 2

Prerequisites: None

# ITS 201 Introduction to Robotics

In this course, learners will be introduced to the industrial use of robots, focusing on the field of renewable energy. Building on the skills developed in Programming I, learners will write simple code for programming a robot.

Credits: 2

Prerequisites: PGR 101

# ITS 203 Operating Systems

This course introduces learners to basic commands and operations in several commonly used operating systems, such as Microsoft Windows, Linux/Unix, Mac OS, and mobile device operating systems. Learners demonstrate the ability to install software, perform file management, configure the user environment, and troubleshoot common operating system problems.

Credits: 2 Prerequisites: PGR 109

# ITS 205 Systems Analysis and Design

In this course, learners study the essential concepts of project management as applied to IT projects. Learners use the systems development life cycle, and other appropriate design tools. The course includes a discussion on agile methodologies. Credits: 2 Prerequisites: None

# MARKETING COURSES

# MKT 101 Marketing and Sales of the Small and Micro Business

In this course, learners will be introduced to the common marketing functions in a small business and the process of bringing the goods/services from the small business to the consumer. The course will cover the basics of economic and behavioral data that informs effective marketing along with marketing problems that can impact a small business. Learners will create a draft marketing plan for their business. Credits: 2

Prerequisites: None

# MATHEMATICS COURSES

# MAT 101 Foundational Algebra

In this course, learners will solve algebraic equations and conduct operations on algebraic expressions. In addition, learners will represent functions symbolically, numerically, and graphically. Credits: 2 Prerequisites: None

# MAT 201 Don't Step in the Bulls#it! Workplace Statistics

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals, and hypothesis testing. Credits: 2

Prerequisites: None

# PHYSICS COURSES

# PHY 101 Fundamentals of Physics

This course covers mechanics, gravitation, thermodynamics, and waves. An emphasis is placed on quantitative reasoning and problem solving. Credits: 2 Prerequisites: MAT 101

# **PROFESSIONAL COURSES**

## **PRO 201 Professional Ethics**

A study of ethical principles and of ethical problems in the professional world. The course is intended to provide learners with the ability to analyze ethical issues that arise in professional situations. The course includes the study of codes of ethics, case analyses, and individual projects that align with learners' career goals.

Credits: 2

Prerequisites: None

### PRO 290 Professional Capstone

This course provides a cohesive ending to the degree by having learners complete a project related to their career goals. Credits: 2 Prerequisites: None

# **PROGRAMMING COURSES**

# PGR 101 Fundamentals of Coding

This course provides an introduction to creating and managing online code repositories using GitHub. The course emphasizes the importance of problem-solving in coding. Credits: 2 Prerequisites: MAT 101

## PGR 103 Introduction to Web Design and Web Programming

In this course, learners recognize the basic elements of web design. In addition, learners, using World Wide Web Consortium (W3C) standards compliant code, write basic pages using markup

#### CATALOG

language, hyperlinks, tables, frames, images, and forms. Learners are introduced to JavaScript programming language. The course includes HTML5 and simple CSS. Credits: 2

Prerequisites: None

# PGR 105 Coding for Data Analytics

In this course, learners write code to clean, analyze, and manipulate data, as well as create and share analysis documents that integrate code, visualization, and text. The languages and tools used in this course are Python Pandas, Python, JavaScript, and HTML. All code is stored in GitHub repositories created in the Fundamentals of Coding course. Credits: 2

Prerequisites: PGR 101

# PGR 107 Intermediate Web Programming

This course focuses on web programming languages and frameworks as important tools in data analytics, including creating interactive web pages to collect data. This course will have a module on copyright and ethics issues in web development.

Credits: 2

Prerequisites: PGR 103

## PGR 109 Programming I

Introduces the fundamental concepts of structured programming and provides a comprehensive introduction to the Information Technology field. Topics include data types, control structures, functions, arrays/storage, and running, testing, and debugging code. Credits: 2

Prerequisites: PGR 101

# PGR 111 Database Programming

In this course, learners focus on data definitions, data manipulation, data control, report generation, and write code that creates, updates, and produces reports. Credits: 2 Prerequisites: PGR 109

### PGR 209 Programming II

In this course learners review control structures and structured data types. Learners apply the object-oriented programming paradigm, focusing the use of classes and object-oriented design. Credits: 2

Prerequisites: PGR 109

## PGR 213 Object Oriented Programming

In this course, learners focus on object-oriented programming including the fundamentals of structured design using classes and objects.

Credits: 2 Prerequisites: PGR 209

PGR 215 Data Structures I

In this course, learners apply commonly used data structures and the related algorithms with an emphasis on object-oriented data structures. This is the first course in a two-part course. Credits: 2

Prerequisites: PGR 209

## PGR 217 Data Structures II

In this course, learners code recursive sorting algorithms, variations of linear data structures such as linked lists, stacks, queues, and hash tables, and variations of non-linear data structures such as trees, heaps, and graphs.

Credits: 2

Prerequisites: PGR 215

# RENEWABLE ENERGY COURSES

# REN 101 Renewable Energy I

In this course, learners will discuss the need for renewable energy systems in light of current environmental challenges. The course covers the societal perceptions of renewable energy systems as well as the challenges in implementing renewable energy systems. The course beings to introduce learners to different types of renewable energy systems which will be expanded upon in course II.

Credits: 2 Prereguisites: None

# **REN 103 Renewable Energy II**

This course provides an overview of various renewable energy technologies, such as: solar, geothermal, fuel cell, wind, hydro, tidal wave, photovoltaic, and biodiesel. Learners will cover the advantages and disadvantages of each system, including cost, maintenance needs, feasibility of use, and energy efficiency.

Credits: 2

Prerequisites: REN 101

# **REN 201 Business Applications for Renewable Energy**

This course introduces the learner to business applications for renewable energy. Learners will study real world examples of business applications, such as decisions about investing in, managing, promoting, and using renewable energy sources.

Credits: 2

Prerequisites: None

## **REN 205 Electric Machines**

This course covers the use of machines that utilize automation hardware, such as programmable logic controllers (PLCs). Learners analyze the efficiency, benefits, and challenges of automation. Credits: 2

Prerequisites: None

# REN 207 Renewable Energy & Safety

In this course, learners will discuss the common safety ticks when working with renewable energy systems, as well as mitigation strategies. The course covers the commonly applied OSHA regulations in the renewable energy industry. The course covers real world cases of safety risks. Lastly, the course provides links to relevant concerning safely protocols and laws. Credits: 2

Prerequisites: None

# VETERINARY CARE AND MANAGEMENT COURSES

# VCM 101 Animal Behavior

This course covers a brief history of domestication as well as the basic concepts relating to the behavior of common domestic animals such as dogs and cats. Included in the course is a discussion of normal behavior traits, common behavioral problems, and the best practices for behavior modification.

Credits: 2 Prerequisites: None

# VETERINARY TECHNOLOGY COURSES

# VET 101 Fundamentals of Vet Care I

In this course, learners are introduced to common terminologies in the veterinary field. The course covers the various support roles in animal care and career opportunities in the field, as well as the connection to environmentally conscious practices. Learners will be introduced to the basics of breed differentiation, and animal behavior.

Credits: 2

Prerequisites: None

# VET 103 Fundamentals of Vet Care II

This course expands on the concepts learned in Fundamentals of Vet Care I. It includes modules on safety, ethics, laws, and the humane treatment of animals. The course includes one visit (physical or virtual) to a veterinary clinic.

Credits: 2

Prerequisites: None

# VET 105 Patient Management

In this course, learners study techniques for handling animals commonly seen in veterinary practices. In addition, this course covers communication with the client as well as nutrition, restraint, handling procedures, and animal admitting procedures. Credits: 2

Prerequisites: VET 101

## VET 107 Animal Anatomy for VT I

This course provides an introduction to the biological functions of both large and small animals. The course introduces common terminologies as they relate to the anatomy and physiology of animals. Animal medical terminology will be included throughout the course. Learners will get an introduction to the skeletal and muscular systems. This course includes a lab. Credits: 2

Prerequisites: BIO 100

# VET 109 Animal Physiology for VT I

This course continues the introduction to both large and small animals. It covers the nervous, endocrine, and sensory systems of domestic animals. Learners will develop an understanding of the importance of each of these systems in diagnosing animal health, as well as in managing animal pain. This course includes a lab.

Credits: 2

Prerequisites: None

## VET 111 Animal Anatomy for VT II

In this course learners will investigate the respiratory, cardiovascular, and digestive systems of large and small animals. Learners will note the connections between the three systems for animal health and note key problems that can arise in these domains. This course includes a lab.

Credits: 2 Prerequisites: VET 107

# VET 113 Animal Physiology for VT II

In this course, learners study the reproductive, urinary, immune, and lymphatic systems of domestic animals. Learners will also compare the difference between the biological systems of different species of domestic animals. This course includes a lab.

Credits: 2

Prerequisites: VET 109

## VET 115 Medical Nursing and Preventative Medicine I

This course covers infectious and non-infectious diseases in domestic animals including the etiology, symptoms, and clinical signs of disease. This course includes a lab. Credits: 2 Prerequisites: None

## VET 117 Medical Nursing and Preventative Medicine II w/CCE

This course covers infectious and non-infectious diseases in domestic animals including treatment, prevention, and disease pathology. This course includes a lab. Credits: 2 Prerequisites: VET 115

### VET 119 Microbiology

In this course, learners develop the knowledge and skills necessary to identify pathological genus and species of bacteria, fungi, and viruses. Credits: 2

Prerequisites: None

# VET 201 Clinical Pathology I w/CCE

This is the first course of a two-course sequence which provides a working knowledge of interpreting test results to diagnose common diseases of domestic animals. Hands-on experience is stressed in the areas of hematology, blood draw, urinalysis, and cytology. Also covered is the proper handling and transportation of samples. This course includes a lab. Credits: 2

Prerequisites: VET 119

# VET 203 Clinical Pathology II w/ CCE

This is the second course of a two-course sequence which provides a working knowledge of interpreting test results to diagnose common diseases of domestic animals. Hands-on experience is stressed in the areas of hematology, blood draw, urinalysis, cytology. Also covered is the proper handling and transportation of samples. This course includes a lab. Credits: 2

Prerequisites: VET 201

# VET 205 Veterinary Imaging and Radiology I w/CCE

This course covers the fundamentals of filming and developing radiographs. Learners will learn how to position animals and radiation safety procedures. This course includes a lab. Credits: 2

Prerequisites: None

# VET 207 Veterinary Dentistry w/CCE

In this course learners study the importance of good dental hygiene in domestic animals, particularly canines, dental diseases, and the process to clean the teeth of a canine. Credits: 2

Prerequisites: None

# VET 209 Pharmacology for VT I

This course covers basic pharmacology concepts for Vet Techs. The course covers methods of drug testing as well as how to safely handle drugs. As a part of this course, learners will recognize reactions to drugs and learn the steps to mitigate the reactions. Credits: 2

Prerequisites: CHE 101 and VET 119

# VET 211 Pharmacology for VT II

This course continues the basic pharmacology concepts for Vet Techs. The course covers procedures for storing drugs, labeling drugs, calculating proper dosages, and measuring drug dosages. The procedures for communicating with clients will also be covered in the course. Credits: 2

Prerequisites: VET 209

# VET 213 Clinical Large Animal w/CCE

This course provides learners with the knowledge of best practices to safely handle large farm animals. The course covers restraint of large animals and special issues in the care of large animals. Also covered are the unique nutritional needs and the common threats to the well-being of large animals. This course may require a visit to a farm. Credits: 2

Prerequisites: None

# VET 215 Clinical Small Animal w/CCE

This course provides learners with the knowledge of best practices to safely handle domestic animals. The course covers restraint of domestic animals and special issues in the care of domestic animals. Also covered are the unique nutritional needs and the common threats to the well-being of domestic animals.

Credits: 2

Prerequisites: None

# VET 217 Anesthesiology for VT I w/CCE

This course prepares the learner to assess and monitor domestic animals during surgical procedures, focusing on anesthesia and anesthetic protocols. The course includes an emphasis on pain management techniques.

Credits: 2

Prerequisites: None

# VET 219 Anesthesiology for VT II w/CCE

In this course learners demonstrate best practices to handle anesthesiology emergencies. In addition, learners will focus on post-anesthesia recovery procedures. In addition, learners practice client communication before, during, and after anesthesia administration. Credits: 2

Prerequisites: VET 217

# VET 221 Surgical Nursing for VT I w/CCE

This course prepares the learner to assess and monitor domestic animals during surgical procedures, focusing on the skills needed for surgery. The course also covers the process of sterilizing and handling surgical equipment, as well as preparing the animal for surgery. Credits: 2

Prerequisites: None

# VET 223 Surgical Nursing for VT II w/CCE

This course is a continuation of Surgical Nursing for VT I. Learners discuss best practices for handling surgical emergencies. Additionally, learners develop the skills to communicate surgery techniques along with other post-surgical instructions to the client. Credits: 2

Prerequisites: VET 221

# VET 225 Telehealth in Veterinary Medicine

In this course, learners will explore telehealth/telemedicine technologies as they relate to the veterinary practice. Learners will familiarize themselves with the AVMA policies on telemedicine

and telehealth along with the state and federal Veterinarian-Client-Patient-Relationship (VCPR) requirements. In addition, learners will be introduced to key state laws including client patient confidentiality laws, federal and state records requirements, state veterinary telehealth laws, and state pharmacy laws. Learners will also study the appropriate communication techniques for communicating with a client virtually.

Credits: 2

Prerequisites: None

# UNITY ENVIRONMENTAL UNIVERSITY TECHNICAL INSTITUTE CATALOG SECTION 8: UNIVERSITY POLICIES

# Honor Code

The Unity Environmental University Honor Code requires that learners be honest in all academic work. By joining the Unity Environmental University Community, learners express willingness to accept the responsibilities and privileges of the academic community. Academic dishonesty threatens the mission of Unity Environmental University and potentially jeopardizes the success and integrity of its learners and programs. Every Unity Environmental University learner is responsible for upholding the principles of academic honesty. Personal ethics and integrity should govern all actions.

### Academic Dishonesty

Cases of dishonesty in Technical Institute academic matters are referred to the VP/Dean of the Technical Institute. The actions of the VP/Dean may include any combination of the following:

- Investigate alleged violations of the Honor Code
- Arbitrate instances of academic dishonesty not settled to the learner's or the faculty member's satisfaction
- Determine whether the Honor Code has been violated and specify consequences
- Maintain a record of alleged infractions and subsequent findings

If a Technical Institute faculty member suspects a violation of the Honor Code, they will notify the VP/Dean and discuss the matter with the alleged violator. If the matter is not resolved to the satisfaction of both parties, either party may appeal to the proper administrative channels which is first, VP/Dean of the Technical Institute, and then if the parties feel that the VP/Dean of the Technical Institute did not follow due process, the Unity Environmental University President. The President's decision is final.

Academic dishonesty includes, but is not limited to, the following:

#### Plagiarism

We acknowledge the difference between citation errors, in which a writer incorrectly cites a source, and plagiarism, in which a writer engages in any of the following:

- Quoting, summarizing, or paraphrasing any part or all of a source without acknowledging the source in the text of any work.
- Incorporating any information—data, statistics, examples, etc. that is not common knowledge without attributing the source of that information.
- Using another's images, sounds, opinions, research, or arguments without attribution.
- Failing to follow fair-use policies, which dictate informal acknowledgement or formal citation depending upon the context and assignment.
- Submitting work that someone else completed.
- Submitting an assignment for one class in another class without approval of both instructors.

• Please refer to <u>Purdue OWLS's Plagiarism FAQs</u> for more information.

Cheating

- Submitting an assignment for one class in another class without approval.
- Claiming credit for work not done independently (excluding University support services) without giving credit for aid received.
- Seeking out, accepting, or actively aiding in any unauthorized collaboration or communication during examinations. This includes but is not limited to sharing answers and using technology without prior permission.

#### Misrepresentation

When someone other than the learner enrolled in the course completes any part of the coursework.

#### Falsification

Falsifying or deliberately misrepresenting data and/or submission of work.

# The Family Educational Rights and Privacy Act of 1974

The Family Educational Rights and Privacy Act (FERPA) affords learners certain rights with respect to their educational records. These rights include:

#### Inspection of Records

A learner has the right to inspect and review their education records within 45 days of the day the University receives a request for access. If a learner wishes to inspect their education records, they should contact the Registrar to make arrangements.

#### Amendment of Records

A learner has the right to request the amendment of their education records that the learner believes are inaccurate, misleading, or otherwise in violation of the learner's privacy rights under FERPA. A learner who wishes to ask the University to amend a record should write to the <u>Registrar</u>, clearly identify the part of the record the learner wants changed, and specify why it is inaccurate or misleading.

If the University decides not to amend the record as requested, the University will notify the learner in writing of the decision and the learner's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the learner when notified of the right to a hearing.

### **Disclosure of Records**

Unity Environmental University must obtain a learner's written consent prior to disclosure of personally identifiable information contained in educational records except in circumstances permitted by law or regulations, some of which are summarized below.

### **Directory Information**

Unity Environmental University designates the following learner information as directory information that may be made public at its discretion: name, address, telephone listing, email address, photograph, date and place of birth, major field of study, grade level, enrollment

status, most recent educational agency or institution attended, and learner ID number or other identifier other than a Social Security number (but only if the identifiers cannot be used to gain access directly to education records without one or more other factors such as a password), participation and level of learners in officially recognized activities, dates of attendance in the University, degrees, honors and awards received, and photographs and videos relating to learner participation in campus activities open to the public.

Learners who do not want the University to disclose directory information must notify the Registrar's Office in writing. This opt-out request will remain in effect unless and until it is rescinded by the learner in writing.

School Officials with Legitimate Educational Interests

Education records may be disclosed to school officials with a legitimate educational interest. A school official has a legitimate educational interest if they need to review an education record in order to fulfill his/her professional responsibility. School officials include persons employed by the University as an administrator, supervisor, academic or research faculty or staff, or support staff member (including health or medical staff and law enforcement unit personnel); persons or companies with whom the University has contracted to provide specific services (such as attorneys, auditors, medical consultants, field placement supervisors and other related personnel, collection agencies, evaluators or therapists); Board of Trustee members; learners serving on official committees or assisting other school officials in performing their tasks; and volunteers who are under the direct control of the University with regard to education records.

# Learner Identity Verification Policy

In compliance with the provisions of the United States Federal Higher Education Opportunity Act (HEOA) of 2008, Public Law 110-315, concerning the verification of learner identity in distance learning, Unity Environmental University has established and will periodically evaluate its process to confirm that person who is enrolling in the University is the person who is completing the enrollment form, that a learner taking an examination is the learner who registered to take the examination, and that the learner who is registered for an online course is the same learner who participates in, completes, and receives credit for the course.

To authenticate identities, Unity Environmental University will use one or more of the following methods for verification:

- A secure login with username and password
- Proctored examinations
- New or emerging technologies and practices that are effective in verifying learner identification

All methods of verifying learner identity must protect the privacy of learner information in accordance with the Family Educational Rights and Privacy Act (FERPA), any other applicable laws or regulations regarding the confidentiality of personally identifiable information, and the University's Privacy Policy.

Personally identifiable information collected by the University may be used as the basis for identity verification. This information may include a combination of the following:

- Learner ID number
- Last four digits of the learner's Social Security Number
- At least two other pieces of information such as the learner's email address on file, date of birth, address, or username, etc.

# Active Duty and Veteran Learners

Unity Environmental University welcomes applications from veterans, active military members, and their dependents. Any learner wishing to use educational benefits from the Veterans Administration must submit a copy of a Certificate of Eligibility or Tuition Assistance voucher to their assigned Recruitment Specialist or Career Coach. Veterans using Vocational Rehabilitation and Employment benefits must inform their VA counselor of their intention to attend the Technical Institute.

### VA Benefits

The degree programs of the Technical Institute for Environmental Professions at Unity Environmental University are <u>pending approval</u> by the Maine State Approving Agency for Veterans Education Programs for persons eligible for educational benefits (GI Bill®) from the U.S. Department of Veteran Affairs. Learners who have questions about their eligibility should visit the Veterans Administration web site at <u>Veteran Administration</u> or call (888) 442-4551.

Veteran learners are expected to complete all registered courses each term. Any change in academic workload must be reported to the University. Failure to do so may result in incurring debt.

Under S2248 PL 115-407 Section 103, the Technical Institute/Unity Environmental University will not impose a late fee, denial of access to facilities, or other penalty against a veteran or eligible dependent due to a late payment of tuition and/or fees from the VA up to the certified benefits amount. Any portion of the learner bill not covered by VA benefits is still expected to be settled by the due date.

### Military Tuition Assistance

Military tuition assistance [TA] is awarded to a learner under the assumption that the learner will attend school for the entire period for which the assistance is awarded. When a learner withdraws, the learner may no longer be eligible for the full amount of TA funds originally awarded. To comply with the Department of Defense [DoD] policy, Unity Environmental University will return to the DoD any unearned TA funds on a prorated basis through at least the 60% portion of the period for which the funds were provided. TA funds are earned proportionally during an enrollment period, with unearned funds returned when a learner stops attending. In instances when a service member stops attending due to a military service obligation, Unity Environmental University will work with the affected service member to identify solutions that will not result in a learner debt for the returned portion in compliance with the DoD policy.

#### Schedule for returning unearned TA

5-Week Courses [35 days in term]

- Drop course before third day of term: 100% returned
- Withdrawal from course, days 4-11: 80% returned
- Withdrawal from course, days 12-17: 60% returned
- Withdrawal from course, days 18-21: 45% returned
- Withdrawal from course, days 22-35: 0% returned

For those courses that have durations differing from those listed above: unearned TA funds will be returned on a prorated basis, depending on the length of the course. To determine the amount of TA that needs to be returned, the institution will determine the date the withdrawal was submitted, then divide that by the number of days in the term to determine the percentage of TA that was earned by the learner.

*GI Bill*<sup>®</sup> is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <u>GI Bill</u>.

CATALOG

# **SECTION 9: RESOURCES**

# Academic Calendar

Please see the <u>webpage</u> for the current Technical Institute for Environmental Professionals academic calendar.

# **Financial Aid Consumer Information**

Please see the <u>webpage</u> for institutional information for consumers.

# **University Resources**

The mailing address for all Technical Institute correspondence is:

Technical Institute for Environmental Professions Unity Environmental University 70 Farm View Drive New Gloucester, ME 04260

University Switchboard: (207) 509-7100 University Website: <u>unity.edu/TIEP</u>

ADA Coordinator for Technical Institute (207) 509-7290

Recruitment, Academic Advising, and Support Services <u>TIEP@unity.edu</u>: (207) 509-7119

# Registrar

registrarsoffice@unity.edu: (207) 509-7257

Student Financial Services <u>fin\_aid@unity.edu</u>: (207) 509-7235

Date Modified: June 20, 2023 Adoption Chain: TI Leadership, President