MS TCBES Checklist
- UH Hilo Graduate application form
- Application fee, $50
- Personal statement of objectives
- Resume
- Three professional or academic letters of recommendation
- Official transcripts from all colleges or universities (must be received in a sealed envelope)
- Baccalaureate degree transcripts from international institutions must be submitted to a transcript evaluation service.
- General Test, Graduate Record Exam (must be received directly from testing agency, or in a sealed envelope if submitted with your application): UH Hilo code: 4869
- Have received confirmation of TCBES faculty sponsorship if Thesis Track (Plan A)
- For International applicants:
  - Official TOEFL score report, if required
  - International Graduate Student Supplemental Information Form

Priority deadline for receipt of all application materials in the Graduate Division: December 1

Program Purpose and Goals
The primary purpose of the MS in TCBES is to provide graduate training in conservation biology and environmental science to people with baccalaureate degrees and others currently working in the field. The program will utilize the extraordinary biological, physical and cultural complexity on the Island of Hawai‘i as a focus of investigation and study. The program will prepare students for technical positions and for entry into Ph.D. programs in related fields.

Program objectives:
- Foster knowledge of current trends and issues in conservation biology and environmental sciences including basic and applied research and natural resource problems;
- Provide participants with experiences in conceptual and technical research in ecology, evolutionary genetics, geographic analysis, environmental monitoring and assessment in marine and terrestrial environments;
- Promote research and scholarly activities that will enable participants to enter the scientific research community.

The program has two tracks. In the Thesis Track (Plan A), students conduct original research and write a research proposal and thesis. In the Internship Track (Plan B), students pursue an array of courses and an internship that provides an immersion training experience. The intern will write a detailed proposal and work directly with agency personnel in a two-way obligation between TCBES and the organization.

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Application Process
Applications will be examined beginning Dec. 1 for admission to the following Fall semester. After Dec. 1, applications will be accepted on a space available basis until May 1. Apply online at:
http://hilo.hawaii.edu/admissions.Apply.php

The UH Hilo Graduate Division receives all supporting documents and maintains the applications through final notification. If you do not hear from us within 30 days of submission of your application, please contact the Graduate Division at 808-932-7926. Applications that meet the admission criteria will be forwarded to the TCBES Admissions Committee for a comprehensive review and consideration for admission into the program. Admission decisions made by the committee will be forwarded to the Graduate Division which sends the final notification to the applicant.

Admission Status: The applicant’s admission status is valid only for the semester to which the applicant is accepted. Applications for students who do not register or who withdraw from the University are voided but retained for a period of one (1) year. Students may reapply for admission to the next year by submitting a new application to the Admissions Office with the application fee.

Criteria for Admission:* Acceptance is granted at the discretion of the Admissions Committee based on the six criteria listed below. An applicant must:
1) have earned a baccalaureate degree from an accredited institution or from a nationally recognized foreign institution.
2) in her/his personal statement, state whether he/she is interested in Plan A or Plan B. If Plan A, the applicant must list advisor(s) from the TCBES faculty who agrees to sponsor the application and to serve as primary advisor upon acceptance to the program. Plan B students are not required to get sponsorship from an advisor.
3) have a minimum combined verbal and quantitative score of 290 on the General Graduate Record Exam (GRE).
4) have a grade point average of 3.0 (4.0 = A scale) or the equivalent in the last four semesters of approximately 60 semester credits of undergraduate and/or in all post-baccalaureate work.
5) submit three letters of recommendation from references who have observed or supervised the applicant’s performance and are able to comment on the quality of the applicant’s academic achievement, ability to pursue graduate study, and general character.
6) earn a score of 550 TOEFL (paper based), 213 (computer based) or 79 (internet based), or 6.0 IELTS (for students who have not attended an English language university, or for whom English is not the primary language).

*Recommended course work prior to admission: 2 years chemistry; 1 year calculus; 1 course in geographic information or remote sensing, 1 course in statistics; 2 courses in life sciences; 2 additional courses in physical sciences

Transfer of Credits: Requests for transfer of graduate credits must be made during the first semester in which the student is enrolled in the program. Only credit hours with a grade of B or better from accredited universities are transferable. Transfer credit hours must have been completed within five years preceding the date upon which the advanced degree is to be conferred by UH Hilo, and must not have been used to satisfy requirements for another degree. The TCBES program will decide which credits will be transferred.
Frequently Asked Questions

http://tcbes.uhh.hawaii.edu/

1. Do I need to find a faculty sponsor?
   If you are interested in Plan A then you are required to contact individual faculty members whose research interests are similar to your own and who agree to sponsor your application to the program. It is recommended that you begin faculty contact well before the application deadline. If you are interested in Plan B then you are not required to have a sponsor.

2. How do I find a faculty sponsor?
   TCBES faculty information can be found within this application and on the TCBES Program website.

3. How long does it take to complete the program?
   The course work is designed to be completed in 3-4 semesters, with additional time needed for completing the thesis or internship.

4. What are the entrance requirements?
   See Checklist and Criteria for Admission.

5. Do I have to take the GRE?
   Yes, applicants are required to submit General GRE exam scores to UH-Hilo (UH Hilo code: 4869).

6. Can I transfer credits?
   Yes, up to 6 credits, subject to program approval.

7. When will the program start?
   Classes for new students begin in the fall of each year.

8. How much will it cost to live in Hilo?
   You should budget approximately $30,000 per year (residents of Hawai‘i) and $39,000 (non-residents) for tuition, books, housing, food, and personal expenses.

9. Is financial aid available?
   Graduate assistantship positions may be available (contact Dr. Ostertag: ostertag@hawaii.edu). You may also contact faculty and participating agencies for financial assistance. Students interested in assistantship positions must have submitted the FAFSA; students who meet the deadline for financial aid will have priority for assistantship positions and other aid. Contact the UH-Hilo Financial Aid Office for more information (808-932-7449).

10. Do I need to write a thesis?
    Plan A requires course work and a thesis of original research. Plan B requires course work, an internship, and research papers.

Cost: $484 per credit hour resident tuition 2018-2019
     $1,102 per credit hour non-resident 2018-2019
Total Credits: 30 credits Plan A, 36 credits Plan B

### Core Courses (required for all MS TCBES students):

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<thead>
<tr>
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<tbody>
<tr>
<td>600</td>
<td>3</td>
<td>Conservation Biology and Environmental Science</td>
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<td>601</td>
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<td>TCBES Field and Laboratory Methods</td>
</tr>
<tr>
<td>602</td>
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<td>Research Seminar in TCBES</td>
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<tr>
<td>603</td>
<td>1</td>
<td>Natural Resource Management Seminar</td>
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### Elective Courses:

**Plan A:** 16 elective credits of 600-level TCBES courses.

**Plan B:** 25 elective credits of 600-level TCBES courses.

### Elective Courses:

<table>
<thead>
<tr>
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<tr>
<td>610</td>
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<td>Environmental Chemical Analysis</td>
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<td>615</td>
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<td>620</td>
<td>3</td>
<td>Research Techniques in Molecular Conservation Biology</td>
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<td>630</td>
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<td>Nearshore Monitoring and Analysis</td>
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<td>633</td>
<td>3</td>
<td>Biodiversity</td>
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<tr>
<td>635</td>
<td>3</td>
<td>Physical Environment of Ecosystems</td>
</tr>
<tr>
<td>640</td>
<td>3</td>
<td>Advanced Remote Sensing and Digital Image Processing</td>
</tr>
<tr>
<td>645</td>
<td>3</td>
<td>Applying Social Science to Marine and Coastal Resource Management</td>
</tr>
<tr>
<td>650</td>
<td>3</td>
<td>Oceanographic Monitoring and Analysis</td>
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<tr>
<td>655</td>
<td>3</td>
<td>Ecological Physiology</td>
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<td>660</td>
<td>3</td>
<td>Molecular Ecology</td>
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<td>665</td>
<td>3</td>
<td>Environmental Toxicology</td>
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<tr>
<td>670</td>
<td>3</td>
<td>Advanced Techniques in Geographic Information Systems</td>
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<tr>
<td>675</td>
<td>3</td>
<td>Conservation Genetics</td>
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<tr>
<td>677</td>
<td>3</td>
<td>Quantitative Ecology</td>
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<td>680</td>
<td>3</td>
<td>Advanced Statistical Analysis and Research Design</td>
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<td>685</td>
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<td>Behavioral Ecology and Evolutionary Analysis</td>
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<td>694</td>
<td>1-3</td>
<td>Special Topics in Tropical Conservation Biology and Environmental Sciences</td>
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<tr>
<td>699</td>
<td>1-3</td>
<td>Directed Research</td>
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### Thesis and Internship Courses:

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<tr>
<td>690</td>
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<td>Internship (Plan B: 3 credits required)</td>
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<tr>
<td>700</td>
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<td>Thesis Research (Plan A: 6 credits required)</td>
</tr>
</tbody>
</table>
TCBES Faculty

Norman Arancon  normanq@hawaii.edu  
Associate Professor, CAFNRM  
Ph.D., The Ohio State University. 
Vermicomposting, composting, soil ecology, organic agriculture, tropical fruit crop production, sustainable agriculture.  
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Associate Professor, Biology  
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Affiliate Faculty, Filipino Studies Certificate Program.  
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Associate Professor, Marine Science
Ph.D., Texas A&M University, Wildlife and Fisheries.
Marine ecology, trophic dynamics of food webs, biochemical tracers.
http://foodweb.uhh.hawaii.edu
<table>
<thead>
<tr>
<th><strong>Tracy Wiegner</strong></th>
<th><a href="mailto:wiegner@hawaii.edu">wiegner@hawaii.edu</a></th>
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<tbody>
<tr>
<td>Professor, Marine Science</td>
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<td>Ph.D., Rutgers University, Oceanography.</td>
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<td>Freshwater and coastal water quality, nutrient and organic matter cycling, microbial processes. <a href="https://hilo.hawaii.edu/faculty/wiegner/">https://hilo.hawaii.edu/faculty/wiegner/</a></td>
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Revised 7/10/2017

Questions about the application process may be directed to [hilograd@hawaii.edu](mailto:hilograd@hawaii.edu), or call 808.932.7926