

A Guide to Completing the Application for the University of Hawai'i at Hilo Master of Science in Tropical Conservation Biology and Environmental Science

MS TCBES Check list

- 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

For International applicants:

- Official TOEFL score report, if required
- [International Graduate Student Supplemental Information Form](#)

Priority deadline: February 1
International applicants: January 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.

Participants of the program will:

- Perform scientific research in the interdisciplinary field of conservation biology and environmental science;
- Develop skills in natural resource and protected area management;
- Use advanced technological equipment, perform quantitative analysis and interpret complex data;
- Present scientific results in oral and written publications;
- Interpret and critique professional scientific literature.

Application Process

Applications will be examined beginning Feb 1 for admission to the following Fall semester. After Feb 1, applications will be accepted on a space available basis until May 1.

The UH Hilo Admissions Office receives applications and 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 Admissions Office at 808-974-7414. 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 Admissions Office 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, list advisor(s) from the TCBES faculty who agrees to sponsor the application and to serve as primary advisor upon acceptance to the program.
- 3) have a minimum combined verbal and quantitative score of 1000 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) (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. The TCBES program will decide which credits will be transferred.

Frequently Asked Questions

Cost: \$320 per cr hr resident tuition 2010-2011
 \$736 per cr hr non-resident 2010-2011
 Total Credits: 30 credits Plan A, 36 credits Plan B

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

1. **Do I need to identify a faculty sponsor?**
 Yes, 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. Faculty sponsorship is required for program acceptance.
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 Check List and Criteria for Admission on the front of this form.
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, 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?**
 Hawai'i residents should budget approximately \$15,000 per year for tuition, books, housing, food, and personal expenses. Non-residents should budget \$20,000.
9. **Is financial aid available?**
 Graduate assistantship positions may be available (contact Dr. Price: donaldp@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 (808-974-7323).
10. **Do I need a computer?**
 Yes, or at least daily access to one.
11. **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.

Course	Cr	Title
Core Courses (required for all MS TCBES students):		
600	3	Conservation Biology and Environmental Science
601	3	TCBES Field and Laboratory Methods
602	1	Research Seminar in TCBES
603	1	Natural Resource Management Seminar
Elective Courses:		
Plan A: 16 elective credits of 600-level TCBES courses.		
Plan B: 25 elective credits of 600-level TCBES courses.		
Elective Courses:		
610	3	Environmental Chemical Analysis
615	3	Global Environmental Change
620	3	Research Techniques in Molecular Conservation Biology
630	3	Nearshore Monitoring and Analysis
633	3	Biodiversity
635	3	Physical Environment of Ecosystems
640	3	Advanced Remote Sensing and Digital Image Processing
645	3	Applying Social Science to Marine and Coastal Resource Management
650	3	Oceanographic Monitoring and Analysis
655	3	Ecological Physiology
660	3	Molecular Ecology
665	3	Environmental Toxicology
670	3	Advanced Techniques in Geographic Information Systems
675	3	Conservation Genetics
677	3	Quantitative Ecology
680	3	Advanced Statistical Analysis and Research Design
685	3	Behavioral Ecology and Evolutionary Analysis
694	1-3	Special Topics in Tropical Conservation Biology and Environmental Sciences
699	1-3	Directed Research
Thesis and Internship Courses:		
690	3	Internship (Plan B: 3 credits required)
700	1-6	Thesis Research (Plan A: 6 credits required)

TCBES Faculty

Donald Price donaldp@hawaii.edu

Director TCBES Graduate Program;
Ph.D. University of Illinois, Urbana-Champaign,
Ecology, Ethology and Evolution, 1991.
Professor, Biology
Evolutionary and conservation genetics, behavioral ecology and
genetics, speciation and local adaptation in insects and birds
<http://www2.hawaii.edu/~donaldp/>

Jason E. Adolf jadolof@hawaii.edu

Ph.D. University of Maryland College Park, 2002.
Assistant Professor, Marine Science
Coastal phytoplankton ecology, real-time continuous monitoring
<http://www.plankton.uhh.hawaii.edu/>

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Ph.D. University of Hawaii at Manoa, Molecular Biosciences
and Bioengineering, 2005.
Assistant Professor, Biology
Molecular microbiology, bioremediation, iron-trafficking
pathways, secondary metabolite production
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Jim Beets beets@hawaii.edu

Ph.D. University of Georgia, Zoology, 1990.
Associate Professor, Marine Science
Marine ecology, fish/fisheries ecology, ecological monitoring

Leng Chee Chang, lengchee@hawaii.edu

Ph.D. University of Illinois at Chicago, Natural Products
Chemistry, 1998.
Assistant Professor, Pharmacy
Isolation, characterization, and biological evaluation of natural
products of marine and microbial origin

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Ph.D. U. of Hawaii at Manoa, Geological Oceanography, 1976.
Professor, Marine Science
Tsunami waves, anchialine pond conservation

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Associate Professor, Geography
cultural geography, tourism, nature-society relations
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Ph.D. Cornell University, Anthropology, 1978.
Professor, Anthropology; Coordinator of Research
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Human environmental physiology, stress, health risk, Pacific
population emphasis
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Ph.D. University of Calgary, 2008.
Assistant Professor, Geography
Geographic Information Science, terrain and flow modeling,
3D visualization

Marta deMaintenon demainte@hawaii.edu

Ph.D. UC Berkeley, Integrative Biology, 1996.
Associate Professor & Chair, Marine Science;
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Phylogeny, biogeography and evolution of gastropod molluscs
<http://inverts.uhh.hawaii.edu/>

Patrick Hart (pjhart@hawaii.edu)

Ph.D. University of Hawaii at Manoa, Zoology (Ecology,
Evolution, and Conservation Biology) 2000.
Assistant Professor, Biology
Ecology and conservation-Hawaiian forests/forest birds
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Maria Haws haws@aol.com

Ph.D. Texas A&M Univ., Wildlife & Fisheries Sciences, 1993.
Associate Professor, CAFNRM
Extension Specialist, University of Hawaii Sea Grant Program;
Pearl research, aquaculture, marine invertebrates, coastal zone
management, natural resources policy, international economic
development

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Ph.D. Auburn University, Fisheries & Allied Aquacultures, 1979.
Professor, Aquaculture, CAFNRM; Interim Director of the
Pacific Aquaculture & Coastal Resources Center
Aquaculture and fisheries development including their
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Ph.D. Northern Illinois University, Biological Sciences, 1989.
Associate Professor, Pharmaceutical Sciences
Host-parasite co-evolution, avian disease systems

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Professor & Chair, Geography
Climatology, fog forest ecosystems, biogeography
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Marine natural products chemistry, isolation and characterization
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Assistant Professor, Forestry
Forest soil ecology, carbon sequestration of tropical forests,
tropical silviculture and forest ecosystem restoration

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Ph.D. University of Florida, Agronomy and Soils, 1992.
Professor, Soil Science & Agronomy
Environmental agronomy, nutrient cycling, water quality,
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Ph.D. Cornell University, Ecology and Evolutionary Biology, 1979.
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Environmental toxicology, physiological ecology of reptiles and amphibians
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Ph.D. University of Auckland, 2006.
Assistant Professor, Anthropology
Fisheries (indigenous; traditional management tools; regulations; property rights)

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Professor, Marine Science
Seaweed/seagrass taxonomy, ecology, biogeography and chemical composition, marine education

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Ph.D. University of Arizona, Toxicology & Pharmacology, 1994.
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Toxicology, environmental chemistry, pesticides in water and biota, epidemiology of volcanic fog (vog)
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Ecological genetics/conservation genetics, phylogeography, and local adaptation of endemic Hawaiian fauna
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Structure and nutrient dynamics of tropical forest ecosystems
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Assistant Professor, Psychology and Biology. Marine mammal behavior, humpback whales, dolphin behavior and cognition

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