

IHB File No. AB-5

CIRCULAR LETTER 56/1999
30 November 1999

**NEW GRADUATE-LEVEL "HYDROGRAPHIC SCIENCE" PROGRAM
AT THE UNIVERSITY OF SOUTHERN MISSISSIPPI,
STENNIS SPACE CENTER, MISSISSIPPI, USA**

Dear Sir,

The Commander, Naval Meteorology and Oceanography Command (CNMOC) has informed the IHB, on behalf of the United States, that a new graduate-level "Hydrographic Science" program has been established at the University of Southern Mississippi (USM), Stennis Space Center, Mississippi, campus with classes beginning in the 1999-2000 academic year.

The Hydrographic Science program is an intensive, one-year course of study designed to meet the academic requirements for a Master of Science degree in Hydrographic Science. There are two options in the course of study: one designed to additionally fulfill the FIG/IHO Category A level standards of competence for hydrographic surveyors, and the second, a more theoretical course of study. Category A status has not yet been awarded but is being sought through FIG/IHO. All coursework will be taught in English only. The program is designed for a class size of ten to twelve students, and will convene annually from mid-August to the following late-July. Academic portions of the course will be taught at the John C. Stennis Space Center, Mississippi, a unique federal complex managed by the National Aeronautics and Space Administration (NASA), where ocean-environmental scientists engaged in research and development activities collaborate with operational and scientific organizations, and high-technology commercial companies. Resident agencies include: the Naval Meteorology and Oceanography Command headquarters, the Naval Oceanographic Office (with the Matthew Fontaine Maury Oceanographic Library), the Naval Research Laboratory, Navy's Major Shared Resource Center (supercomputing and visualization), the Navy's Riverine Warfare Special Boat Unit, the National Data Buoy Center and NASA's Commercial Remote Sensing Program Office. Laboratory courses will be taught at the Stennis Space Center and along the Mississippi Gulf Coast, and field surveying exercises will be taught in the Northern Gulf of Mexico Littoral Region.

The program has been designed to meet the needs of the hydrographic community today and well into the 21st Century with special emphasis on Geographic Information System skills and capabilities. The program's proximity to the Naval Oceanographic Office, the Navy's Center of Hydrographic Expertise, affords a unique opportunity in the United States to work with a wide range of state-of-the-art equipment, and to become involved with concepts of data collection and near-real time all-source data fusion production employed by this global operation. A course syllabus is provided at Annex 1. Additional details about the curriculum are available on the web at <http://www.marine.usm.edu/hydro>.

The program is available to qualifying civilian and military students. Applications for the program can be made through USM following the procedures given on the web site above or by writing direct to the address given here below :

International Student Affairs Office
University of Southern Mississippi
Post Office Box 5151
Hattiesburg, MS 39406-5151
USA.
Fax: +1 601 266 5839
Email: isa@usm.edu)

or through the Security Assistance Training Program (SATP). SATP applicants should contact the Military Advisory Assistance Group or the Security Assistance Officer at the United States Embassy in their country for application procedures. Information is also available on the Naval Oceanographic Office's web site (<http://www.navo.navy.mil>), where there is also information about Navy's six-month, FIG/IHO Category B accredited International Hydrographic Management and Engineering Program.

On behalf of the Directing Committee,
Yours sincerely,

Rear Admiral Giuseppe ANGRISANO
President

Annex 1: M.S. in Hydrographic Science, 1999-2000 Courses (**in English only**)

**The University of Southern Mississippi
Department of Marine Science**

**M.S. in Hydrographic Science
1999-2000 Courses**

Fall Semester

MAR 561	Physical Oceanography	3 hours
HYD 600	Classical Geodesy	4 hours
HYD 602	Marine Geology for Hydrographers	2 hours
HYD 611	Remote Sensing for Hydrography	3 hours
MAR 667	Applied Ocean Acoustics	3 hours

Total Semester Course Load 15 hours

Spring Semester

MAR 667	Waves and Tides	3 hours
HYD 604	Satellite Geodesy and Positioning	3 hours
HYD 605	Applied Bathymetry	3 hours
HYD 606	Nautical Cartography and GIS	3 hours
HYD 601	Hydrographic Data Management	2 hours
HYD 603	Law and Policy for Hydrographic Science	1 hour

Total Semester Course Load 15 hours

Summer Semester

HYD 608	Practical Hydrographic Science	2 hours
HYD 609	Nautical Science	1 hours
HYD 610	Hydrographic Science Field Project	3 hours

Total Semester Course Load 6 hours

Total Degree Program Course Requirement

36 Semester hours