THE FACULTY SENATE

March 19, 2003

MEMORANDUM

TO: Robert M. Gates  
President, Texas A&M University

SUBJECT: Approval of Graduate Certificate Program in Remote Sensing (RS)  
(FS.20.101)

At its regular meeting on March 17, 2003, the Faculty Senate approved the following curriculum item from the Graduate Council and submits it for your approval. Attached is a copy of the material sent to our Senators.

Graduate Certificate Program in Remote Sensing (RS)

Thank you for your time and consideration. Please inform me of your action on this matter.

Robert H. Strawser  
Speaker, 2002-2003

Attachment

c: David Prior  
Karan Watson  
Rick Giardino  
Edward Hiler  
Linda Lacey

Approved:

Robert M. Gates, President

Date 4/1/03

F&DB updated
MEMORANDUM

TO: Dr. Rick Giardino, Dean
    Office of Graduate Studies
    Campus M.S. - 1113

THROUGH: Dr. C.R. Creger
    COALS Executive Associate Dean
    Campus M.S. - 2142

FROM: Dr. David Wm. Reed
    Professor and Interim Head
    Department of Horticultural Sciences

SUBJECT: TAMU Graduate Certificate Proposals - Revised

The COALS Graduate Program Council discussed the requests for a TAMU Graduate Certificate Program in Remote Sensing (RS) and in Geographic Information Science (GIS) (see the attached memo). The COALS Graduate Program Council unanimously recommends approval.

DWR: on

Attachment
27 September 2002

MEMORANDUM

To:     Dr. Rick Giardino
Through: Dr. David Reed
From:   Dr. C. T. Smith
Subject: Graduate Certificate Proposals - Revised

Copies of the revised proposal for a TAMU Graduate Certificate Program in Remote Sensing (RS) and the revised proposal for a TAMU Graduate Certificate in Geographic Information Science (GIS) are enclosed for your approval for the COALS Graduate Program Council and submission to the University Graduate Council.

On the GIS proposal, FRSC 652 and GEOG 655 were removed from the upper level to eliminate duplication with the middle level. This change does not result in a reduction of the requirements for the certificate.

The RS proposal change entails the removal of OCNG 618 due to the death of the professor that taught that course. This removal does not change the overall requirements.

If you have any questions, please let us know.

Cc: Dr. Doug Sherman
PROPOSAL FOR A TAMU GRADUATE CERTIFICATE PROGRAM IN Remote Sensing (RS)

Submitted to the College of Agriculture and Life Sciences by the Department of Forest Science

Submitted to the College of Geosciences by the Department of Geography

1) Rationale

Increasingly, Remote Sensing (RS) technologies are applied to wide-ranging fields such as environmental/resource management, marketing, facility management, agriculture, planning, homeland security and intelligence gathering. In addition, the synergistic linkages between RS technologies and Geographic Information Systems (GIS) are rapidly increasing. The demand for individuals with a solid grounding in remote sensing is growing. The proposed TAMU graduate certificate program in Remote Sensing is designed to meet these growing demands and complement a parallel, proposed TAMU certificate program in GIS. The RS certificate program targets current graduate students who would like to add a Remote Sensing specific credential to their portfolio as a means of enhancing their professional prospects.

2) Curriculum Design

The certificate program will focus on training Remote Sensing Specialists for advanced applications and spatial problem solving. It strikes a balance between technical training and domain-specific expertise. The program will consist of four courses for a minimum of 12 credit hours and will be composed of two foundation courses and two elective courses. The program is designed to be completed in a year, although no time constraints are imposed.

Introductory Level (both are required)
GEOG667X - Remote Sensing for Geographical Analysis
FRSC608 Remote Sensing for Natural Resource Management

Intermediate Level (1 of 2 is required)
GEOG661 - Digital Image Processing
FRSC661 - Photo Interpretation

Specialized Remote Sensing Courses (1 of the following is required)
BUSH66X - Technical Collection Systems in International Security
GEOG696 - Geomorphology and Remote Sensing
METR655 - Satellite Data in Meteorology
ELEN634 - Morphological Methods in Image and Signal Processing
ELEN642 - Digital Image Processing
ELEN649 - Pattern Recognition