IUPUI GAC Reviewer Form

Reviewer:
School:
Department:
Email:
Date Reviewed: 12/26/06
Documents Reviewed: request for a new Graduate Certificate Program in Systems Engineering

Summary of Proposal: The Department of Mechanical Engineering is requesting the establishment of a *Regular Certificate* Program in Systems Engineering, which has already been approved by Purdue.

A clear rationale for need is presented, including a helpful explanation of systems engineering and where this specialty fits within the broader field. Indiana has an unmet need in this expanding area and more specifically, a need for training opportunities centrally based. Facilities and programs are already in place at Fort Wayne and Terre Haute. The program would largely recruit existing employees of the engineering industry and return them as highly valuable members of the team.

The 12 credit hour program would comprise 2 required courses and 2 elective courses, taken from a choice of 21, of which 12 are already in place on this campus. The remaining options would be created subject to demand. All entrance requirements, assessment and outcome procedures are standard.

1. Are the goals clear and achievable? The rationale, aims and goals of the proposed program are clear. The means of achieving these are also clearly laid out and attainable, provided a) the expected student enrollment occurs, b) the faculty can put the additional elective course in place and c) the recruitment of additional faculty will be funded and these individuals come forward.

2. Is the program academically sound? The academic basis and structure of the program are in line with others currently offered. The 12 credit hours meets the minimum required by IUPUI.

3. Are faculty resources available to offer this certificate without undercutting other key missions of the unit? This is apparently allowed for and an impressive number of faculty, committed to the new program, are named. However, it is stated that the recruitment of 2 additional, tenure-track faculty will be needed. Although not stated directly, it is implicit that they are

available from the national pool, given the exciting nature of this emerging and consolidating 'specialty' in engineering.

4. Is there overlap, either real or potential, with any other unit that could harm the program or be exploited to help the program? The overlap occurs in as much as Systems Engineering draws on and contributes to virtually all other branches of the field. Thus, any overlap is an integral part of the proposal.

5. **My recommendation, comments/concerns regarding this proposal…**

    The proposal is sound overall. Reassurance is needed that the necessary faculty will indeed be in place by the time that the first students are admitted to the program. With that assurance, approval is recommended.