82-00

Office of the Registrar
FORM 40 REV. 2/99

PURDUE UNIVERSITY
REQUEST FOR ADDITION, DELETION,
OR REVISION OF A COURSE

SCHOOL DOCUMENT NO. EFD82-0(

GRADUATE COUNCIL DOCUMENT NO.

ARTMENT School of Electrical & Computer Engineering DATE SUBMITTED 8/15/01 DATE EFFECTIVE 8/31/01

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

PURPOSE

[ ] 1.	Deletion of a course	[ ] 8.	Change in semesters offered
[ ] 2.	New course with supporting documents	[ ] 9.	Change in course credit/type
[ ] 3.	Add existing course offered at another campus	[ ] 10.	Change in course attributes
[ ] 4.	Change in course number at same level	[ ] 11.	Change in instructional hours
[ ] 5.	Downgrading of course level	[✓] 12.	Change in prerequisites
[ ] 6.	Upgrading of course level	[✓] 13.	Change in description of course content
[ ] 7.	Change in course title	[ ] 14.	Transfer of course from one dept. to another

EXISTING:

Subject Abbreviation EE
Course Number 661

PROPOSED:

Subject Abbreviation EE
Course Number 661

Proposed Title Computer Vision
Variable Title Yes [ ] No [✓]

Abbreviated Title Computer Vision
Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

SEMESTERS OFFERED

Check All That Apply.

Summer	Fall	Ag Winter	Spring
[ ]	[ ]	[ ]	[✓]

CROSS LISTED COURSES

CREDIT TYPE
1. Fixed Credit: Cr. Hrs. 3
2. Variable Credit Range:
   Minimum Cr. Hrs
   (Check One) To [ ] Or [ ]
   Maximum Cr. Hrs.
3. Equivalent Credit: Yes [ ] No [✓]
4. Thesis Credit: Yes [ ] No [✓]

COURSE ATTRIBUTES: Check All That Apply.
1. Pass/Not Pass Only [ ]
2. Repeatable for Credit [ ]
3. Available for Credit by Examination [ ]
4. Designator Required [ ]
5. Special Fees [ ]
6. Approval Required for Enrollment [ ]
   Department [ ]
   Instructor [ ]

Instructional Type	Class Hours	FTE	Instructional Type	Class Hours	FTE	Instructional Type	Class Hours	FTE
Primary	3		Auto-tutorial			Thesis		
Secondary			Ind. Study			Observation		
Laboratory			Clinic			Matls Based		
Lab. Prep.			Experiential					

CAMPUS(ES) INVOLVED
- Calumet [ ]
- Fort Wayne [ ]
- Indianapolis [ ]
- North Central [ ]
- West Lafayette [✓]
- Off Campus [ ]

COURSE DESCRIPTION (PREREQUISITES INCLUDED):

Autonomous or semi-autonomous systems endowed with visual perception. Vision psychophysics, image representation, edge detection, region-based segmentation, camera modeling, stereo vision, pose calculation, object recognition, optical flows, visual tracking, color vision, and computational geometry. Implementation of vision algorithms through programming assignments.

Calumet Undergrad Curriculum Committee Date	Calumet Department Head Date	Calumet School Dean Date
Fort Wayne Department Head Date	Fort Wayne School Dean Date	Fort Wayne Chancellor C. D. Sutton Date Appr.for Faculty #949 C.D.Sutton,Chair 9/5/01
Indianapolis Department Head Date	Indianapolis School Dean Date	Undergrad Curriculum Committee Date
North Central Department Head Date	North Central Vice Chancellor Date	Date Approved by Graduate Council
[signature] 8/15/2001 Lafayette Department Head Date	L. F. Huggins 6 Sept 01 West Lafayette School Dean Date	Graduate Council Secretary Date
Graduate Area Committee Convener Date	Graduate Dean Date	West Lafayette Registrar Date

OFFICE OF THE REGISTRAR

to Grad school 9/7/01

TO: The Engineering Faculty
FROM: The Faculty of the School of Electrical and Computer Engineering
RE: Changes in EE 661

The faculty of the School of Electrical and Computer Engineering has approved the following course changes. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From:

EE 661 **Computer Vision**
Sem. 2. Class 3, cr. 3.
Prerequisite: EE 570 or consent of instructor

This course deals with how an autonomous or a semi-autonomous system can be endowed with visual perception. The issues discussed include: Sampling from a Topological Standpoint; Grouping Processess; Data Structures, especially hierarchical types such as pyramids, quadtrees, octrees, etc: Graphic Theoretic Methods for structural description and consistent labeling; issues in 3-D Vision such as object representation by Gaussian Spheres, Generalized Cylinders, etc.

To:

EE 661 **Computer Vision**
Sem. 2. Class 3, cr. 3.

Autonomous or semi-autonomous systems endowed with visual perception. Vision psychophysics, image representation, edge detection, region-based segmentation, camera modeling, stereo vision, pose calculation, object recognition, optical flows, visual tracking, color vision, and computational geometry. Implementation of vision algorithms through programming assignments.

Reason: The proposed course description and removal of prerequisite better reflect the updated content of the course.

APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE COMMITTEE ON
FACULTY RELATIONS

CFR Minutes #949

Date 9/5/01

Chairman CFR C. D. Sutton

L. Kent Fuchs

W. Kent Fuchs
Professor and Head