**A Project Report on**

**AUTOMATIC ATTENDANCE TRACING USING IMAGE PROCESSING IN PYTHON**

**Submitted in partial fulfillment of the requirements for the award of the Degree of**

**Bachelor of Technology**

**in**

**Electronics and Communication Engineering**

**By**

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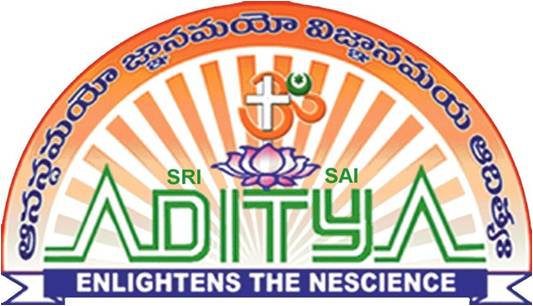
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**Department of Electronics and Communication Engineering**

**ADITYA ENGINEERING COLLEGE**

**(An Autonomous Institution)**

(Approved by AICTE, New Delhi, Affiliated to JNTUK Kakinada, Accredited by NAAC with ‘A’ Grade)

Aditya Nagar, ADB Road, Surampalem

**2019 – 2023**

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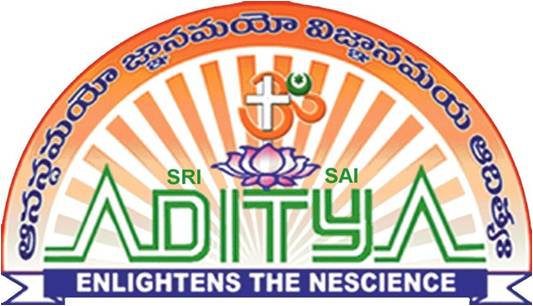
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**CERTIFICATE**

This is to certify that the thesis entitled “**Automatic Attendance Tracing using Image Processing in Python”** is being submitted by

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in partial fulfillment of the requirements for the award of degree of B**.Tech** in Electronics and Communication Engineering from **Jawaharlal Nehru Technological University Kakinada** is a record of bonafide work carried out by them at Aditya Engineering College.

The results embodied in this Project report have not been submitted to any other University or Institute for the award of any degree or diploma.

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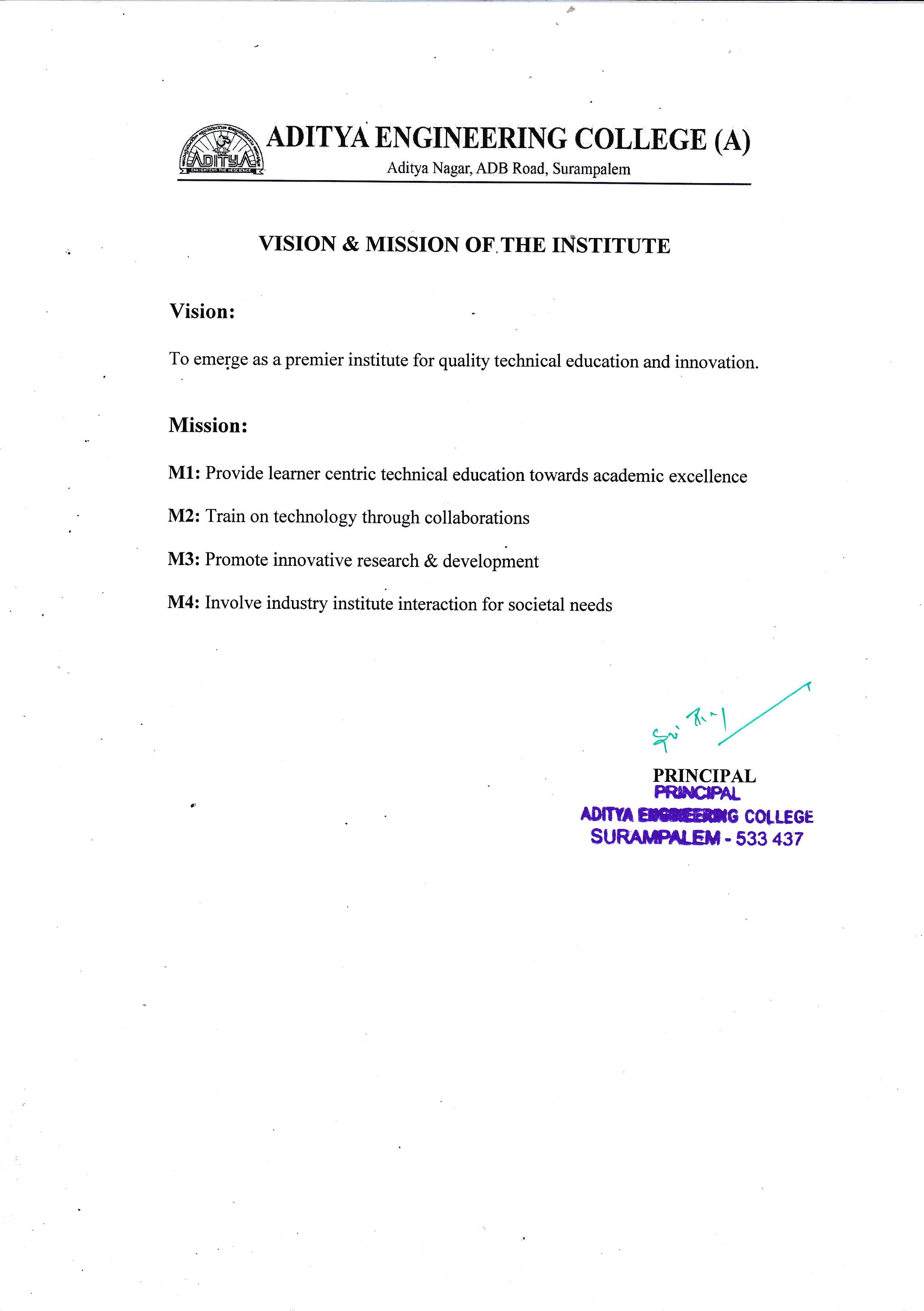
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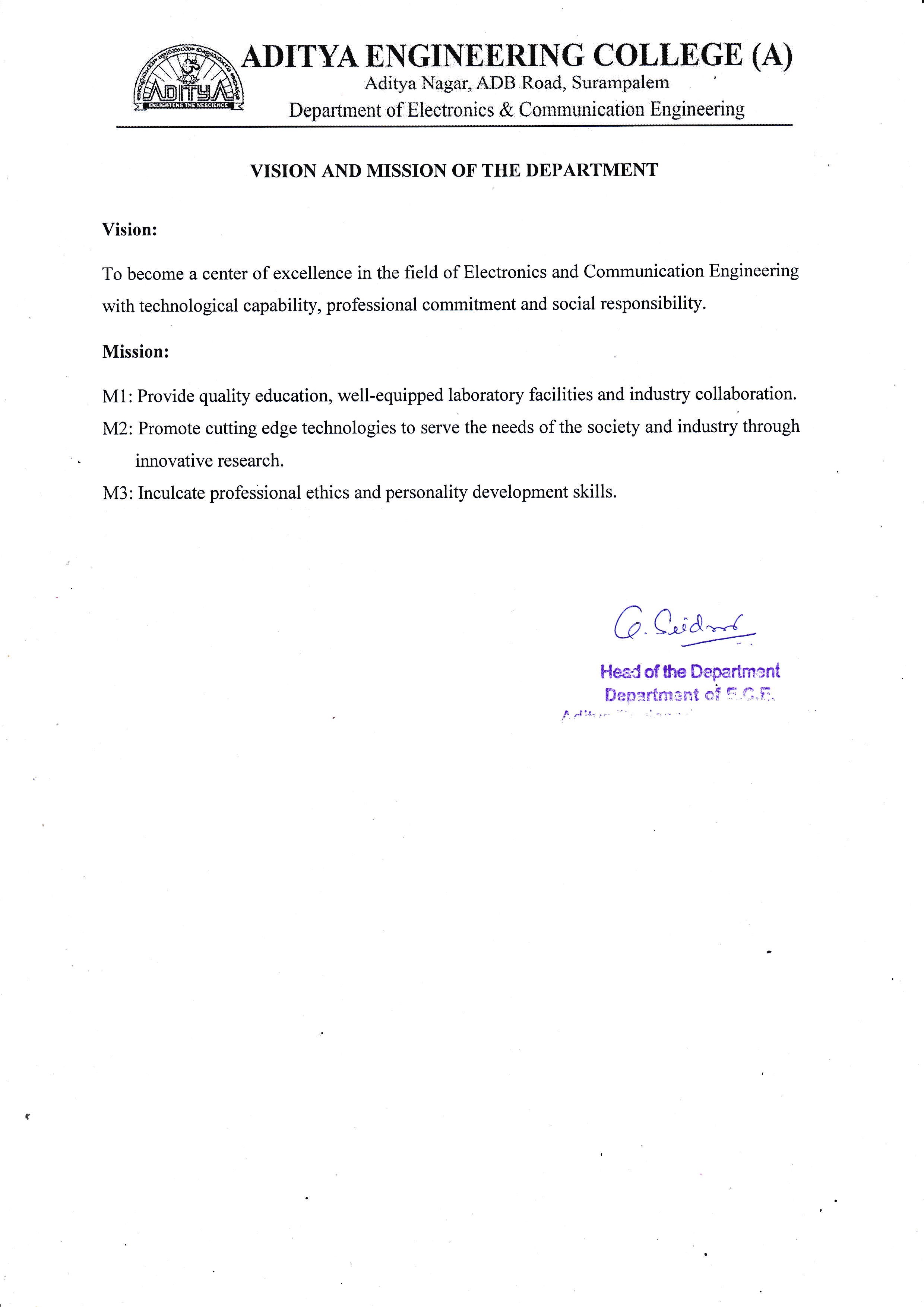
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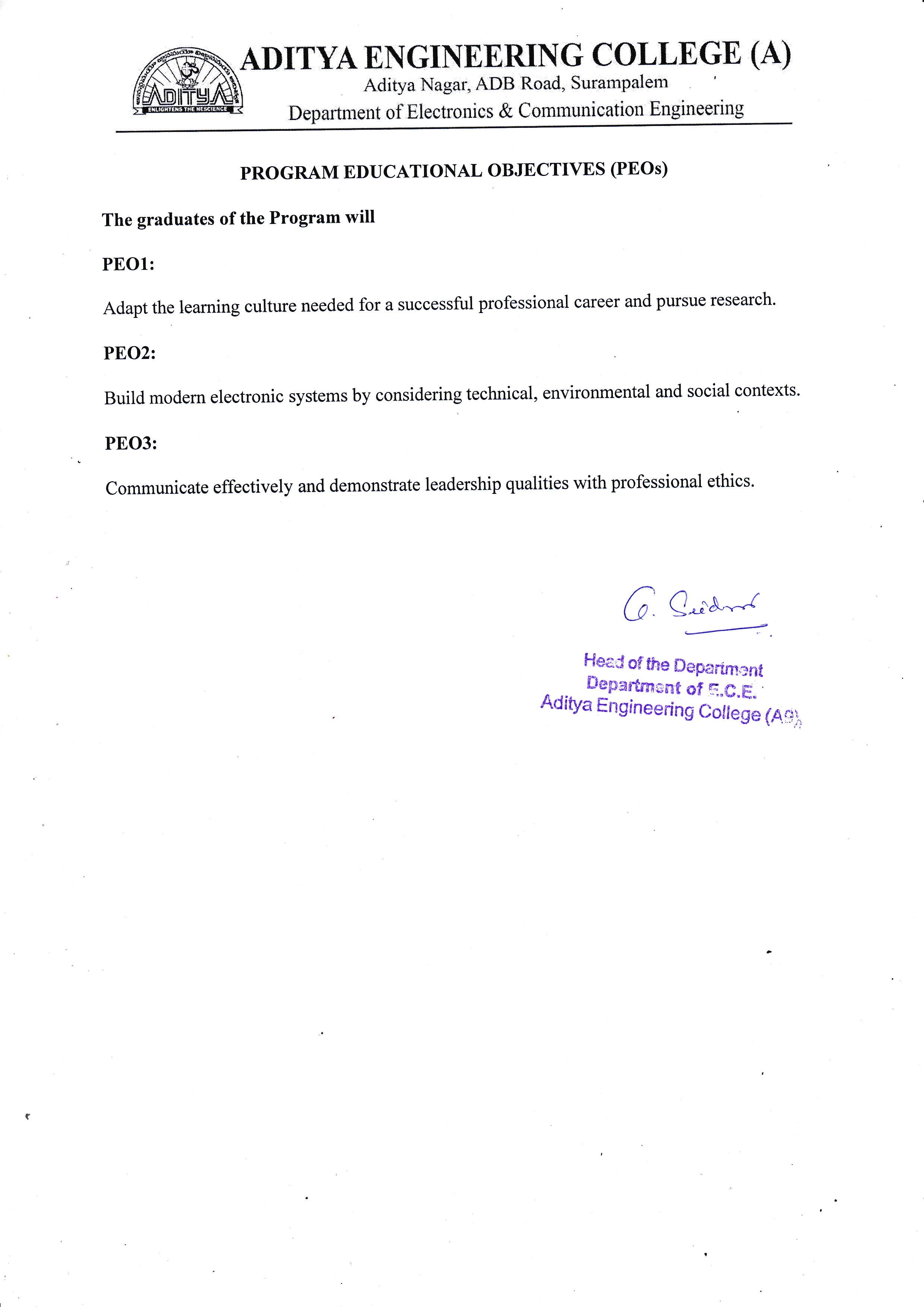
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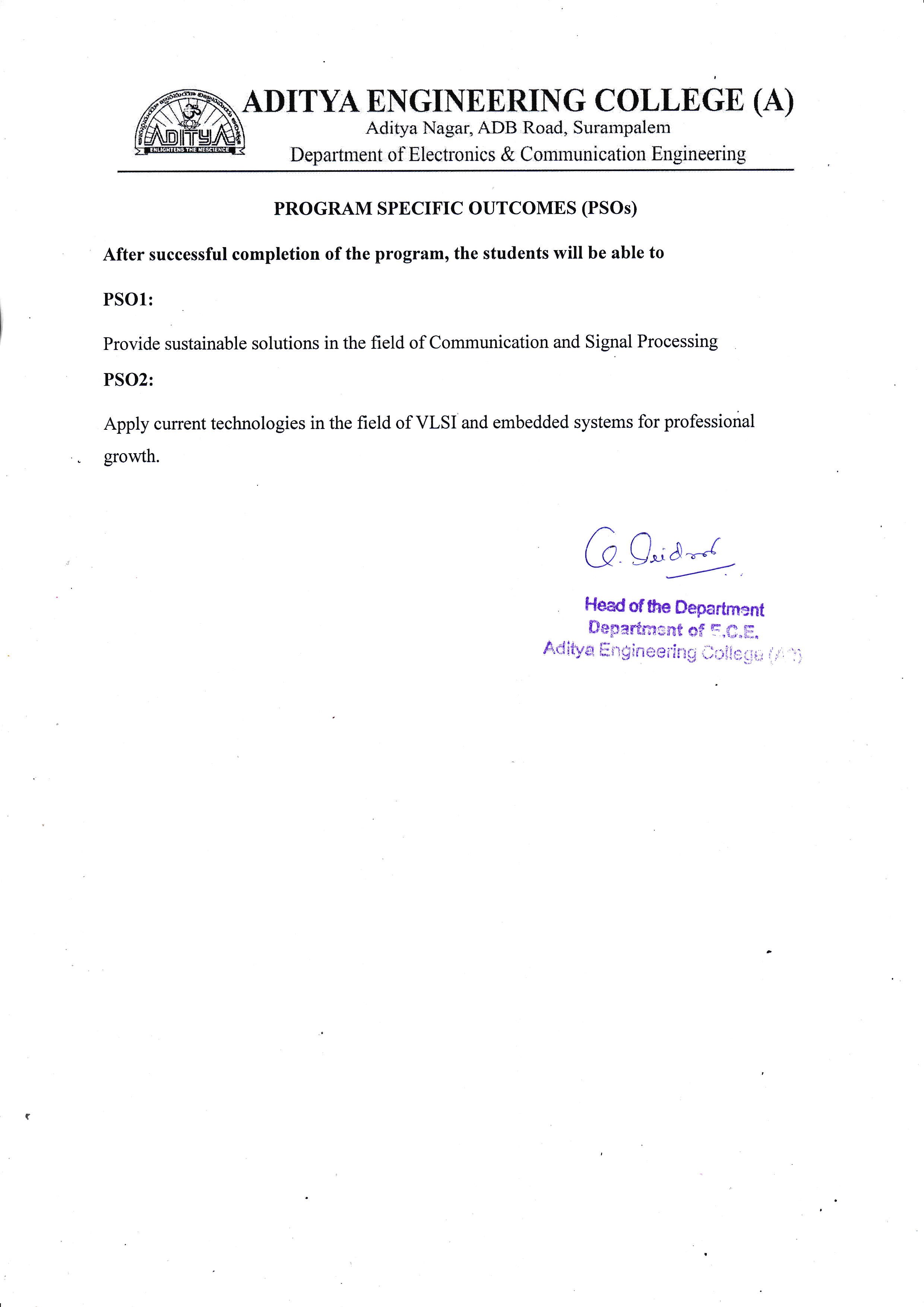
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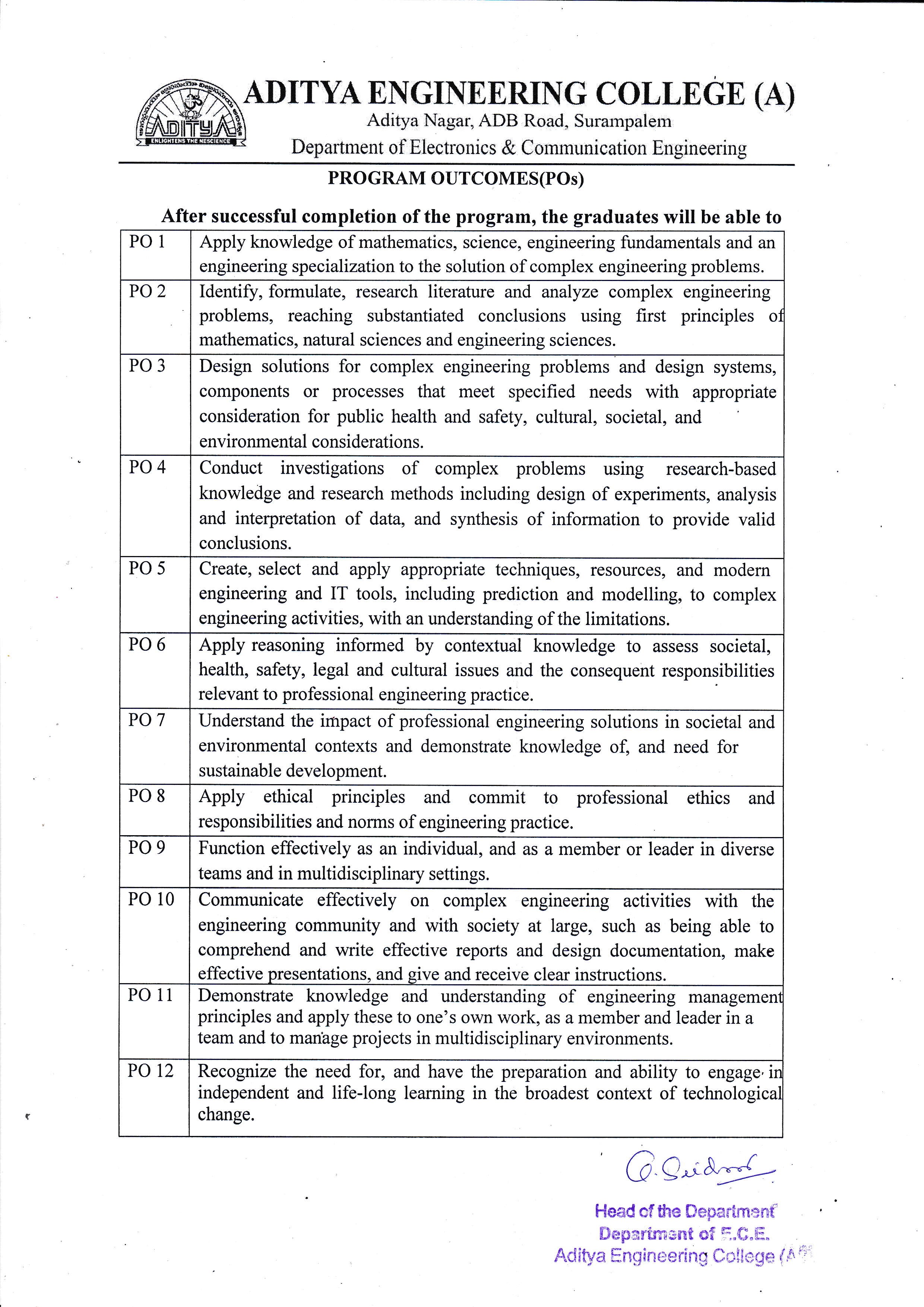
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**ABSTRACT**

There are different prevailing methods to capture person's presence like biometrics to take attendance which is a time-consuming process then why going with biometrics or manual attendance while we have a better alternative using image processing. In the human body, the face is the most crucial factor in identifying each person as it contains many vital details.

In this Project,

The group image is captured first and then from the group image individual faces are identified using face-recognition module and the recognition of faces is done by using KNN(k-nearest neighbours) Algorithm. The capturing of image is continued till the class ends. The attendance will be posted at the end of the class after identification of each and every person. The database can be updated yearly to yield more accurate results.

Automatic Attendance Tracing(AAT) marks individual attendance, if the captured image matches the image in the database i.e., if both images are identical. The proposed algorithm reduces effort and captures day-to-day actions of managing each student and also makes it simple to mark the presence.