



A. G. PATIL POLYTECHNIC INSTITUTE, SOLAPUR

TRANSFORMATION

Newsletter

2K23-24



**Department of Electronics and
Telecommunication**

Engineering



It gives me immense pleasure to introduce newsletter of the Electronics and Telecommunication Engineering program for the academic year 2023-24. Our program has been successfully reaccredited by "NBA" accreditation and got "Excellent" grade from a monitoring committee of MSBTE. The program has 60 intake of students. The overall result in E&TC department for the year 2023-24 is 92.57%. In all 160 students have appeared for the Winter 2023 exam. Out of which 60 students passed with distinction and 69 students in first class and the average result was 92.92%. In all 171 students have appeared for Summer 2024 exam. Out of which 78 students passed with distinction and 56 students in first class and the average result was 92.22%.

Total 7 faculties are working in our program out of which are highly qualified and skilled with modern Era pedagogies and software tools for effective teachings. As per our vision, our team strives to persistently improve the educational environment in our program. We are always engaging our students in the activities for overall development of various aspects like Technical knowledge, Hands-on Skills, Attitude, Ethics and Team spirit required for a professional. So, we have conducted SAP Training Program, Entrepreneurship Awareness Camp for third year students, we also look forward for girl students empowerment and Personality development for all students.

Thank You,
Mr. Bagban S. R.

H. O. D.



VISION

MISSION

To provide excellent quality education in the field of Electronics and telecommunication engineering to create professionals for meeting the demands of industry, business and society.

M1 :- To equip students with strong foundation of knowledge, skills, attitude and team spirit required for a professional.

M 2 :- To prepare students for a bright career ,entrepreneurship in the field of electronics engineering.

M3 :- To inculcate responsibility towards Environment and society.



Program Educational Objectives (PEOs):

PEO1:- To provide students with basics in electronic engineering.

PEO2:- To develop an ability to apply electronic systems to function effectively.

PEO3:- To work for society with professional ethics, team spirit, effective communication and lifelong learning skills.

In This Issue

- Academic performance, co-curricular and extra curricular activities
- Students achievement in IEDSSA Sports meet.
- Organized MSBTE state level Paper Presentation Competition.
- Organized E-Phlox state level Competition.
- Organized Engineers Day.
- Expert Lectures, Industrial Visits.
- College Intake Information.



Paper published by Staff:



- Mr. Bagban S. R. has published research paper on 'Pick And Place Robotic Arm Vehicle' in IJARASEM. Has published research paper on 'Fire Fighter Robot' in IJARASEM.



- Mr. Margur L. S. has published research paper on 'Fire Fighter Robot' in IJARASEM.

Third Year Ranker



**PATIL
AMRUTA
APPASAHEB
93.41%**



**AAYUSH
GUNJAN
91.94%**



**DUMAN
WAR
POONAM
90.88%**

If you FAIL, never give up because F.A.I.L. means "First Attempt in Learning". END is not the end; in fact E.N.D. means "Effort Never Dies". If you get NO as an answer, remember N.O. means "Next Opportunity".

Second Year Ranker



**JADHAV
SNEHA
AJAY
93.20%**



**HORTI
SHREYA
MALLIKARJUN
91.86%**



**JADHAV
MEGHANA
PRASAD
90.97%**

First Year Ranker

Confidence and Hard work is the best medicine to kill the disease called failure. It will make you successful person.



**BAYLE SAI
VIVIEK
92.11%**



**PALANGE
PRACHI
PRASHANT
86.94%**



**SAYYED
SANA
AYYUB
86.23 %**

Co-Curricular and Extra Curricular Activities

• **Annum 2k24 (Paper Presentation)–a national level event: 2K23-24**

Our department has arranged a national level event Annum 2k24 (Paper Presentation) all Electronics group students on 02nd March 2024 and department coordinator was Mr. Margur L. S. And Ms. Agarkhedkar M. M.



1st prize winner ANNUM 2k24
Prerana Jagtap & Priti Shinge



Registration of Annum 2k24



From Left: Mr. Margur L. S., Mr Mohite S.K.(VP), Dr. Chougule M. A(P),Mr.Bagban S.R.(HOD)



2nd prize winner ANNUM 2k24
Ayush Gunjan



3rd prize winner ANNUM 2k24
Sneha Jadhav & Om Swami

• E Phlox 2k24 (Technical Competition) -A State level event:

Our department has organized a state level event E phlox 2k24 (Technical Event) for all electronics group students on 02nd March 2024, which includes “Circuit Cracker” Mr. Goden N.A. was the Convener at institute level Ms. Swami P.S. And Ms. Pawar S. R. has worked as Department event Coordinator.



1st prize winner Epholx 2k24
Chinmay Fadtare & Shreya Horti

2nd prize winner Epholx 2k24

“A dream becomes a goal when action is taken toward its achievement.”



Congratulations!



3rd prize winner Epholx 2k24 Sneha Jadhav & Nikita Kakade





Guest Lecture by Dr. Sakhare S. R. on E waste management for TY & SY students.



A Guest Lecture by 'Alumni Expert' for all students by Mr. Firoj Nadaf , Service Engineer from Jabil Electronics Pvt. Ltd., Pune



A workshop for all students on 'Circuit Design & PCB Fabrication' by Mr. Ajitesh from 'Indus Robotics Pvt. Ltd.'Pune.



A workshop for second year students on 'Renewable Energy Green Sector Department' by Mrs. Ayesha Shaikh from 'Shams Energy',



A Expert Lecturer on 'Working in sustainable Development' by Mrs. Ayesha Shaikh from 'Shams Energy', Solapur For second year students on



A Guest Lecture by Mr. Upadhe S. N.
(Assistant Professor) on MSME

Parents Meet 23-24

Sanctioned Funding /Proposal:

- MODROB- The MODROB proposal has been funded for PCB Prototype Machine, under modernization of laboratory, by AICTE New Delhi. The project cost of PCB prototype is Rs.12,73000/-

Industry Supported lab:

- Solar Electronics Lab Donated by Shams Electronics, Solapur
- Embedded Innovation Lab Donated by SuVi Instruments, Solapur



Success is not final; failure is not fatal: It is the courage to continue that counts.

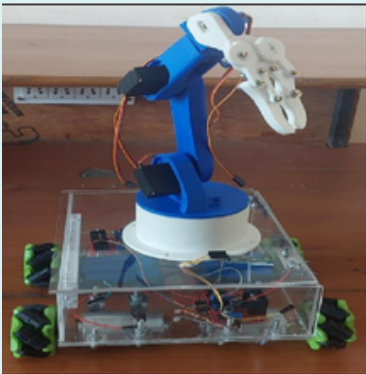


Sr. No.	Name	Event Name	Level	Venue	Prize
1	Chinmay Fadtare	E-Phlox	State	AGPPI, Solapur	First
2	Shreya Horti	E-Phlox	State	AGPPI, Solapur	First
3	Sanchita Gajbhar	Poster Presentation	National	SVERI's Collage of Engineering, Pandharpur	First
4	Praniti Shendge	Poster Presentation	National	SVERI's Collage of Engineering, Pandharpur	First
5	Nikita Kadade	E-Phlox	State	AGPPI, Solapur	Third
6	Sneha Jadhav	E-Phlox	State	AGPPI, Solapur	Third
7		Annum	National	AGPPI, Solapur	Second
8	Ruturaj Swami	Paper Presentation	State	Maulana Azad Polytechnic, Solapur	Third
9	Ritesh Shinde	Paper Presentation	State	Maulana Azad Polytechnic, Solapur	Third
10	Vedant Mulajkar	Quiz Competition	State	Maulana Azad Polytechnic, Solapur	Third
11	Ashwarya Chouwan	Paper Presentation	State	SPM Polytechnic Kumathe, Solapur	Second
12	Prerana Jagtap	Paper Presentation	State	Maulana Azad Polytechnic, Solapur	First
13	Preeti Shinge	Paper Presentation	State	Maulana Azad Polytechnic, Solapur	First
14	Atharva Karatkar	Quiz Competition	State	Maulana Azad Polytechnic, Solapur	First
15	Ayush Gunjan	Project Competition	National	VVP Polytechnic, Solapur	First
16		E-Phlox	State	AGPPI, Solapur	Second
17		Annum	National	AGPPI, Solapur	Third

Paper published by students: Our Best Projects



From Left: Mr. Atharva Karatkar ,Mr. Margur L.S. Mr.Bagban S.R.(HOD), Mr. Ansh Jadhav , Mr. Shrinivas Kulkarn.



• Mr. Ansh Jadhav , Mr. Atharva Karatkar , Mr. Shrinivas Kulkarni (TY) has published research paper on 'Pick And Place Robotic Arm Vehicle' in IJARASEM. Volume 11, Issue 3, May-June 2024

In the constantly advancing field of robotics, the creation of pick-and-place robotic arm vehicles represents a significant milestone in automating tasks that require precision, efficiency, and adaptability. This project aimed to design and implement a robotic arm mounted on a mobile vehicle platform capable of autonomously identifying, picking, and placing objects in various environments. Advanced sensors, such as cameras and proximity detectors, in conjunction with sophisticated control algorithms, empower the robotic system to perform intricate tasks with remarkable accuracy.

The robotic arm vehicle is designed to operate in a wide range of applications, including industrial automation, warehouse management, healthcare, and service industries. By utilizing machine learning techniques, the system is capable of continuously refining its object recognition and manipulation capabilities. Key features include a robust mechanical design for the arm, an efficient navigation system for the vehicle, and a comprehensive software suite for task planning and execution.

The project emphasizes the potential of robotic systems to enhance productivity and safety in environments where manual handling is either impractical or hazardous. Through extensive testing and validation, the robotic arm vehicle demonstrates its ability to adapt to dynamic settings and carry out tasks with minimal human intervention. This innovation not only represents a significant advancement in robotic technology but also paves the way for future breakthroughs in autonomous systems and intelligent automation solutions.

>Mr. Aayush Gunjan, Mr. Sainath Chirandas, Mr. Madhav Sarda (TY) has published research paper on 'Fire Fighter Robot' in IJARASEM. Volume 11, Issue 2, March 2024

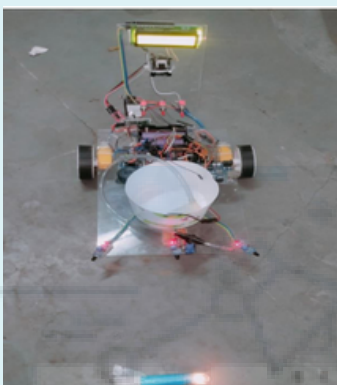
Fire accidents pose a significant threat to life and property. In such scenarios, autonomous robots can play a crucial role in fire suppression and rescue operations. This project aims to design and implement a Fire Fighter Robot capable of detecting and extinguishing fires in indoor environments. The Fire Fighter Robot incorporates various sensors for fire detection, such as temperature sensors and flame detectors, enabling it to locate fire sources accurately. Upon detecting a fire, the robot autonomously navigates through the environment using motor control algorithms and obstacle avoidance mechanisms.

Major fire accidents do occur in industries like nuclear power plants, petroleum refineries, gas tanks, chemical factories and other large scale fire industries resulting in quite serious consequences. Thousands of people have lost their lives in such mishaps. Therefore, this project is enhanced to control fire through a robotic vehicle. Furthermore, the Fire Fighter Robot is equipped with a fire suppression system, which includes a water pump and nozzle for spraying water or fire-retardant substances onto the fire. The robot's actions can be controlled remotely via Bluetooth communication, allowing operators to maneuver the robot from a safe distance.

The implementation of the Fire Fighter Robot involves hardware integration, software development for sensor interfacing and control algorithms, as well as testing in simulated fire scenarios. The results demonstrate the robot's effectiveness in detecting and suppressing fires autonomously, as well as its remote control capabilities via Bluetooth, thereby contributing to fire emergency management and mitigation efforts.



From Left:Mr. Aayush Gunjan, Mr.Bagban S.R.(HOD), Mr. Margur L.S. Mr. Sainath Chirandas, Mr. Madhav Sarda



Drone Camera



A Drone has potential for performing many tasks where humans cannot enter, for example, high temperature and high-altitude surveillance in many industries, rescue missions. A Drone has four propellers with motors that generate the thrust for lifting the aircraft.

A drone is also called as the Quad copter. The basic principle behind the quad copter is, the two motors will rotate in the clockwise direction the other two will rotate in an anticlockwise direction allowing the aircraft to vertically ascend. While taking the flight with the help of a camera we can have live streaming and capture images.



From left : Ravi Ranjan kumar Ram

- Mukesh kumar, • Mr. Bagban S.R.
- Keshav kumar
- Ms. Agarkhedkar M.M.



विद्यार्थ्यांनी साकारला फायर फायटर रोबोट

सकाळ वृत्तसेवा

सोलापूर, ता. २५ : ए. जी. पाटील पॉलिटेक्निकमधील इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन इंजिनियरिंग विभागातील तृतीय वर्षातील विद्यार्थी आयुष गुंजन, साईनाथ चिरणदास व माधव सारडा यांनी अत्याधुनिक तंत्रज्ञान वापरून आगीवर नियंत्रण ठेवू शकणारा 'फायर फायटर रोबोट' बनविला आहे. या रोबोटमध्ये मायक्रो कंट्रोलर, आयआर फ्लेम सेन्सर, लो पावर कॅमेरा, झुस्पी ३२, वॉटर पंप, सर्वो मोटर्स, एलसीडी डिस्प्ले तसेच ब्ल्यूटूथ मॉड्यूल यांचा वापर केला आहे.

आग लागण्याच्या संपाद्य टिकाणी हा रोबोट बसविण्यात येईल. जर अशा टिकाणी आग लागली तर रोबोट वरील तीन फ्लेम सेन्सर कार्यन्वित होतात. आगीची दिशा व तीव्रता ठरवून त्याप्रमाणे स्वयंचालित रोबोट त्या टिकाणी पोचतो. तसेच विशिष्ट अंतरावर थांबून वॉटर



सोलापूर : रोबोट साकारलेले विद्यार्थी आयुष गुंजन, साईनाथ चिरणदास व माधव सारडा.

पंप व एक्सटिंग्UISHER कार्यान्वित करतो. रोबोट वरील लो पावर कॅमेरा व ब्ल्यूटूथ मॉड्यूल च्या माध्यमातून आग विझवतानाची छायाचित्रे ऑनपेटरला किंवा मोबाईलवर पाठविण्यात येतात. आग पूर्णपणे आटोक्यात आल्यानंतर रोबोट मूळ टिकाणी परत येऊन थांबतो. ही सर्व यंत्रणा

मायक्रोकंट्रोलरमध्ये सेव्हड प्रोग्रामद्वारे करण्यात येते. रोबोटचा वापर सर्व्हर रूम, बँक, आय.टी. क्षेत्रातील सेमिनार हॉल्स अत्यंत महत्त्वाच्या टिकाणी होऊ शकतो. या प्रोजेक्टचा लेख IJRSEM या आंतरराष्ट्रीय जर्नलमध्ये प्रकाशित करण्यात आला आहे. या प्रकल्पासाठी विभाग प्रमुख

एस. आर. बागवान आणि प्रोजेक्ट मार्गदर्शक एल. एस. मरगू यांनी मार्गदर्शन केले. संस्थेचे अध्यक्ष एस. ए. पाटील, संस्थेचे कॅम्पस डायरेक्टर व महाविद्यालयाचे प्राचार्य डॉ. एम. ए. चौगुले व उपप्राचार्य एस. के. मोहिते यांनी विद्यार्थ्यांचे व शिक्षकांचे कौतुक केले.

Solapur Solapur-Today
26/05/2024 Page No. 7

सोलापूर तरुण भारत

प्रखर राष्ट्रीय विचारांचे दैनिक



संपादकालय, पाठाण, सोलापूर, अहमदनगर, धार्याडोब, लणत, पोट्टे, पारजनी, हिंगोली, जालना व बॉम्बे येथे प्रकाशित

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26 May 2024 - Page 5

आगीवर नियंत्रण ठेवू शकणारा 'फायर फायटर रोबोट'

पाटील तंत्रनिकेतनच्या विद्यार्थ्यांचा अविष्कार

सोलापूर :

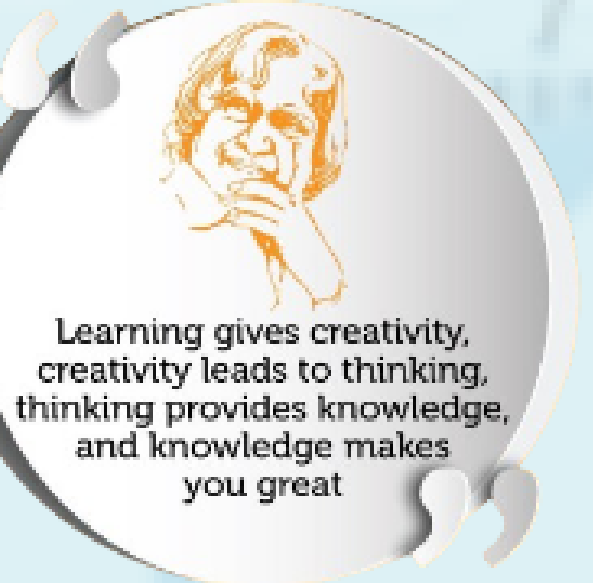
ए जी पाटील पॉलिटेक्निक मधील इलेक्ट्रॉनिक्स अँड टेलिकम्युनिकेशन इंजीनियरिंग विभागातील तृतीय वर्षातील विद्यार्थी आयुष गुंजन, साईनाथ चिरणदास व माधव सारडा यांनी अत्याधुनिक तंत्रज्ञान वापरून आगीवर नियंत्रण ठेवणारा फायर फायटर रोबोट बनविला आहे.

या रोबोटमध्ये Tmega३२८ मायक्रो कंट्रोलर, IR फ्लेम सेन्सर, लो पावर कॅमेरा ESP३२, वॉटर पंप, सर्वो मोटर्स, LCD डिस्प्ले (16x2) तसेच ब्ल्यूटूथ मॉड्यूल (HC0५) यांचा वापर केला आहे. आग लागण्याच्या संपाद्य टिकाणी हा रोबोट बसविण्यात येईल. जर



अशा टिकाणी आग लागली तर रोबोट वरील तीन फ्लेम सेन्सर कार्यन्वित होतात. आगीची दिशा व तीव्रता ठरवून त्याप्रमाणे स्वयंचालित रोबोट त्या टिकाणी पोचतो. तसेच विशिष्ट अंतरावर थांबून वॉटर पंप व एक्सटिंग्UISHER कार्यान्वित करतो. रोबोट वरील लो पावर कॅमेरा व ब्ल्यूटूथ मॉड्यूल च्या माध्यमातून आग विझवतानाची छायाचित्रे ऑनपेटरला किंवा मोबाईलवर पाठविण्यात येतात. आग पूर्णपणे आटोक्यात आल्यानंतर रोबोट मूळ टिकाणी परत येऊन थांबतो. ही सर्व यंत्रणा मायक्रोकंट्रोलरमध्ये सेव्हड प्रोग्राम द्वारे करण्यात येते.

रोबोटचा वापर सर्व्हर रूम, बँक, आय.टी. क्षेत्रातील सेमिनार हॉल्स आदी अत्यंत महत्त्वाच्या टिकाणी होऊ शकतो. या प्रोजेक्टचा लेख IJRSEM या आंतरराष्ट्रीय जर्नलमध्ये प्रकाशित करण्यात आला आहे. या प्रकल्पासाठी विभाग प्रमुख श्री एस आर बागवान आणि प्रोजेक्ट मार्गदर्शक एल. एस. मरगू यांनी मार्गदर्शन केले. तसेच संस्थेचे अध्यक्ष श्री एस ए पाटील, संस्थेचे कॅम्पस डायरेक्टर व महाविद्यालयाचे प्राचार्य डॉ. एम. ए. चौगुले व उपप्राचार्य एस. के. मोहिते यांनी विद्यार्थ्यांचे व शिक्षकांचे अभिनंदन केले.



Learning gives creativity, creativity leads to thinking, thinking provides knowledge, and knowledge makes you great



STUDENT PLACEMENT



John Deere Pune Works India

23 Students Placed



TATA MOTORS Ltd., Pune

23 Students Placed



Cummins India Pvt. Ltd.

05 students Placed

Name of Placed students

CHIRANDAS SAINATH PRABHAKAR
PATIL AMRUTA APPASAHEB
BIRADAR DIKSHITA SHRISHAIL
SHINGE PRITI VIDYADHAR
KULKARNI SHRINIVAS DATTATRAYA
HIPPARGI RUCHITA SHIVANAND
GHODAKE VIVEK REVANSIDDHA
PRERANA JAGTAP
ASHWARYA HIRARAL CHAUWAN
JADHAV ANSH SHRINIVAS
AAYUSH GUNJAN
PRITI KUMARI
BIRAJDAR PRETI SURYAKANT
MOMIN ASAD AHMED IRSHAD AHMED
ALOK RAJ
TARUN KUMAR
RAVIRANJAN KUMAR
ATTAR AYESHA RIYAJ
DUMMANWAR POONAM SHARANAPPA
SUTAR VIRBHADRA YALKANT
BALINGAL PRATIKSHA RAMESH
MUKESH KUMAR S/O SUDAMA YADAV
KESHAV KUMAR

Name of Placed students

CHIRANDAS SAINATH PRABHAKAR
PATIL AMRUTA APPASAHEB
BIRADAR DIKSHITA SHRISHAIL
SHINGE PRITI VIDYADHAR
KULKARNI SHRINIVAS DATTATRAYA
HIPPARGI RUCHITA SHIVANAND
KARATKAR ATHARVA PRAKASH
PRERANA JAGTAP
ASHWARYA HIRARAL CHAUWAN
JADHAV ANSH SHRINIVAS
BIRADAR RAKSHITA BASAVARAJ
SARDA MADHAV SHRIKANT
AAYUSH GUNJAN
BIRAJDAR PRETI SURYAKANT
ALOK RAJ
TARUN KUMAR
DHIRAJ KUMAR
ATTAR AYESHA RIYAJ
DUMMANWAR POONAM SHARANAPPA
TAKLIKAR MAITHILI SHIVAJI
SUTAR VIRBHADRA YALKANT
BALINGAL PRATIKSHA RAMESH
CHANDAN KUMAR S/O JAY PRAKASH

Name of Placed students

AAYUSH GUNJAN
ALOK RAJ
TARUN KUMAR
TAKLIKAR MAITHILI SHIVAJI
PATIL SUYASH DILIP

Jay Hind Pvt Ltd., Pune

02 students Placed

Name of Placed students

ANSIH KUMAR
RAVI RANJAN KUMAR RAM

Congratulations!

To All Placed Students

“A dream becomes a goal when action is taken toward its achievement.”





Industrial visit to Sathe Engineering Company, Bale, Solapur for SY students



Industrial visit to Pancharatna Foundation (Spenca), Solapur for all students (TY, SY).



Industrial visit to Amul Diary, Gujarat for Third year students



Industry expert explaining the process of bottle packaging



DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING



Mr. Bagban S. R.
Designation : HOD
Qualification : M.Tech(VLSI)



Mr. Margur L. S.
Designation : Lecturer
Qualification : B.E.(Electronics)



Ms. Pawar S. R.
Designation : Lecturer
Qualification : B.E.(E&TC)



Ms. Swami P. S.
Designation : Lecturer
Qualification : B.Tech(E&TC)



Ms. Agarkhedakar M.M.
Designation : Lecturer
Qualification : B.E.(Electronics)



Mrs. Birajdar L. S.
Designation : Lecturer
Qualification : MA (English)



Mrs. Gavandi S.N.
Designation : Lecturer
Qualification : MSC (Chem)



Mrs. Kasabe S. K.
Designation : Lecturer
Qualification : B.E.(Electronics)

NON-TEACHING STAFF



Mr. Pathan H. A.
Designation: Lab Assistant
Qualification: Diploma
(Electronics)



Mr. Hadapad S. S.
Designation: Lab Assistant
Qualification: ITI (Electronics) &
Diploma (Computer &
Hardware Networking)



Shanti Educational Society's
A. G. PATIL POLYTECHNIC INSTITUTE
NBA ACCREDITED

18/2/2 A, Vijapur Road, Opp. SRP Camp, Solapur-8

Approved by : All India Council for Technical Education (AICTE),
New Delhi

Recognized by : Government of Maharashtra

Approved by : Directorate of Technical Education (DTE), Mumbai

COURSES OFFRED IN DIPLOMA ENGINEEING

Discipline	Intake Capacity	Duration of Course
Civil Engineering	60	3 YEARS
Computer Engineering	60	3 YEARS
Electronics and Telecommunication Engineering	60	3 YEARS
Mechanical Engineering	60	3 YEARS
Electrical Engineering	60	3 YEARS
Total Intake	300	

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