असतो मा सद्गमय ।
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SANDIP FOUNDATION

SANDIP FOUNDATION'S
SANDIP INSTITUTE OF ENGINEERING & MANAGEMENT
Nashik

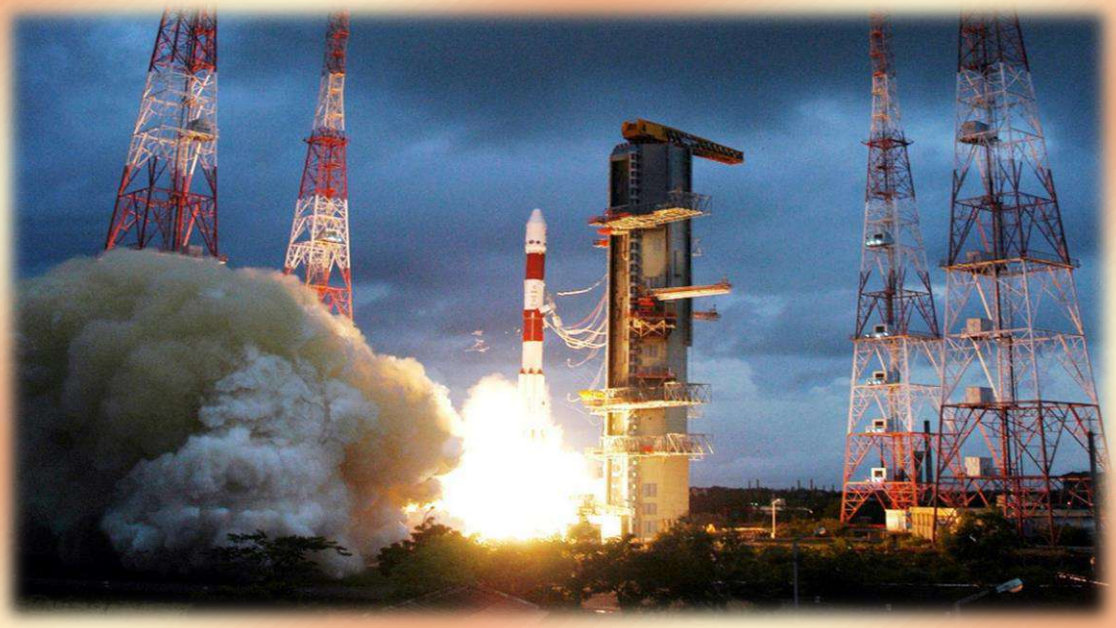
SIEM

E-BULLETIN

AUGUST 2017

Editor's Section:

Mangalyaan



The Mars Orbiter Mission (MOM), also called Mangalyaan is a space probe orbiting Mars since 24 September 2014. It was launched on 5 November 2013 by the Indian Space Research Organisation (ISRO). It is India's first interplanetary mission and ISRO has also become the fourth space agency to reach Mars. The Mars Orbiter Mission probe lifted-off from the First Launch Pad at Satish Dhawan Space Centre, Shriharikota, Andhra Pradesh, using a Polar Satellite Launch Vehicle (PSLV) rocket C25 on 5 November 2013. After a 298-day transit to Mars, it was successfully inserted into Mars orbit on 24 September 2014. The spacecraft is currently being monitored from the Spacecraft Control Centre at ISRO Telemetry, Tracking and Command Network (ISTRAC) in Bangalore with support from Indian Deep Space Network (IDSN) antennae at Byalalu. The total cost of the mission was approximately ₹450 Crore making it the least-expensive Mars mission to date. The low cost of the mission was ascribed by K. Radhakrishnan, the chairman of ISRO, to various factors, including a "modular approach", few ground tests and long (18–20 hour) working days for scientists.

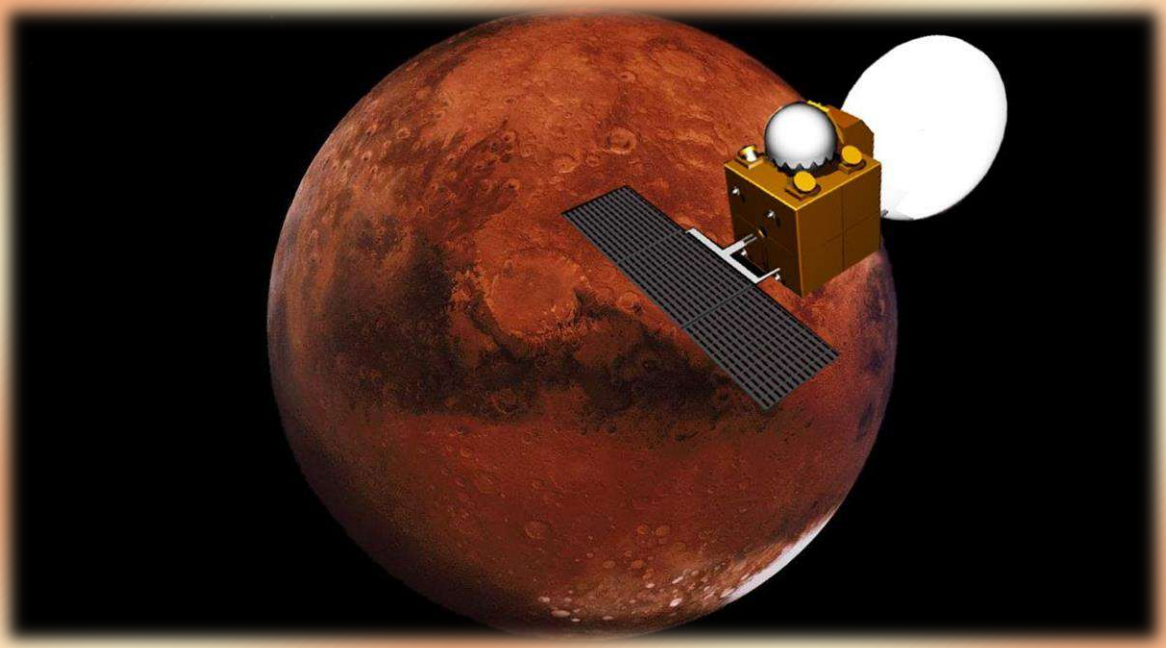
Primary objectives:

The main objectives are to develop the technologies required for designing, planning, management and operations of an interplanetary mission comprising the following major tasks:

- Orbit manoeuvres to transfer the spacecraft from Earth-centred orbit to heliocentric trajectory and finally, capture into Martian orbit
- Development of force models and algorithms for orbit and attitude computations and analysis
- Navigation in all phases
- Maintain the spacecraft in all phases of the mission
- Meeting power, communications, thermal and payload operation requirements
- Incorporate autonomous features to handle contingency situations

Scientific objectives:
The scientific objectives deal with the following major aspects:[

- Exploration of Mars surface features by studying the morphology, topography and mineralogy
- Study the constituents of Martian atmosphere including methane and CO2 using remote sensing techniques
- Study the dynamics of the upper atmosphere of Mars, effects of solar wind and radiation and the escape of volatiles to outer space
- The mission would also provide multiple opportunities to observe the Martian moon Phobos.



ALUMNI INTERACTION PROGRAM
AT E&TC ENGINEERING DEPARTMENT

Subject: - “Preparation for Master of Science (M. S.) Abroad”

Speaker: - Mr. Akshay Shelar,Class:- TE & BE

Date: 24/08/2017

Outcomes:-

- Students got the basic idea regarding preparation for MS.
- Students learned about the different entrance exams for MS.
- Students learned how to prepare for these entrance exams.
- Students understood the post entrance procedure for admission to MS.
- Students get aware about well known university of different countries for MS.

Guest Lecture on
"Opportunities in German Language"

Ms. Priyanka Kulkarni
German Language Expert.

Date: 20/07/2017

Objectives: 1) To give introduction to German language as it is the tenth most widely spoken language in the world.

2) To know career opportunities after learning German language.

Outcome: 1) Students learn alphabets, numerals and colors in German language.

2) Students aware with opportunities after learning German language.

3) Students are able to give introduction of themselves in German language.

EXPERT LECTURE ON
“Introduction to Aviation Industry and opportunities in HAL ”

Event Date: - 21st August 2017

Event Resource Person Details:

Mr.Shankar Narayan; AGM- Mig Aircraft and Honorary Secretary in The Aeronautical Society of India, Nasik Branch

Objective: The event was organized by Mechanical Engineering Student Association (MESA) to create awareness among students regarding Aviation industry and to introduce them to various opportunities in **Hindustan Aeronautics Limited (HAL).**

Outcomes: Students were informed about the history and basics of airplanes and also made aware about different ways to make career in HAL. **The toppers of previous years were felicitated by Hon. Speaker.**

EXPERT LECTURE ON
“Entrepreneurship Development”
Mr. Shyamsundar S. Bahekar,
Senior Engineer, ABB India Ltd., Nashik

Date: 30/08/2017

Outcomes:-

- Students understood the importance of Entrepreneurship.
- Students learned the characteristics of an Entrepreneur.
- Students learned how to recognize the business opportunity that fits the individual student.
- Students understood how to launch individual’s entrepreneurial career.
- Students also get aware about the risk factor in Entrepreneurship.

INDUSTRIAL VISIT
"SHIVANAND ELECTRONICS"
Lam Road, Devlali

Date – 11/08/2017

Participants - S.E (E & TC) Students

Outcome -

Students have learned the working operation of following Equipments :

1. **Metal Detector,**
2. **Automatic Transformer Ratio Meter,**
3. **Digital Surge Tester.**
4. **Indoor Security System.**

Workshop on Java

Mr Sandeep Patil,
Director – v3 Data solutions, Nashik.

Name of Event Coordinator: Prof. A. R. Gaidhani
Number of Students: 93

Event Objectives & Outcomes:

Objectives:

a. Understanding the object oriented concepts.
b. Gain knowledge about basic Java language syntax and semantics to write Java programs and use concepts such as variables, conditional and iterative execution methods etc.
c. Understand the fundamentals of object-oriented programming in Java, including defining classes, objects, invoking methods etc and exception handling mechanisms.
d. Understand the principles of inheritance, packages and interfaces.

Outcomes:

- Read and understand Java-based software code of medium-to-high complexity.
- Use standard and third party Java's API's when writing applications.
- Understand the basic principles of creating Java applications with graphical user interface (GUI).
- Create rich user-interface applications using modern API's such as JAVAFX.
- Understand the fundamental concepts of computer science: structure of the computational process, algorithms and complexity of computation.
- Understand the basic approaches to the design of software applications.
- Apply the above to design, implement, appropriately document and test a Java application of medium complexity, consisting of multiple classes.


NASHIK TO HYDERABAD
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N1-DATA SOLUTION

EXPERT LECTURE ON

“SIGNALS & SYSTEMS”

A Session on
VIRTUAL REALITY

Mr. Manas Gajare,
Founder & CEO Zabuza Labs, Nashik

Coordinator: Prof. A G Patil
No. of Participants: 111 Students

Description:

Zabuza Lab is working on Augmented Reality & Virtual Reality. Students have used and tested the devices like HTC Vive, Google VR headsets, Google Glass, Google Home, etc. Students first time not even seeing and getting the information about the devices but they used them. Students has looks the different Android App developed by the Zabuza team on Augmented Reality and get the knowledge about the logic behind the app.

EXPERT LECTURE ON

“HOW TO PLAN FOR CIVIL SERVICES ”

Event Date :- 29th July 2017

Event Resource Person: Mr.Harshad Bhele

Director – CONNECT INDIA for Administrative studies IAS institute.) & Council Member - Forum for Integrated National Security (FINS), Home Ministry.

Event Objective & Outcome :-

Objective : The event was organized by Mechanical Engineering Student Association (MESA) to boost the students who are aspiring for civil services exams also to guide them regarding planning and scheduling of their preparations .

Outcomes : Students were highly motivated as number of students approached the speaker after the program ended and the question answer session stretched up to 1 hours .


Department Of Mechanical Engineering
Mechanical Engineering Student's Association (MESA)
MESA

SESSION ON
SOFTSKILL DEVELOPMENT

by

Mr. Osden D Mello
Columbus IT Solution ,Mumbai

Objectives:

The objectives of the Skills Soft Training Workbook are to give each student a realistic perspective of work and work expectations, to help formulate problem solving skills, to guide students in making appropriate and responsible decisions, to create a desire to fulfill individual goals, and to educate students about unproductive thinking, self-defeating emotional impulses, and self- defeating behaviors .

Seminar on
"Cyber Security and Cyber Law"

by Sajid Ansari & Wasim Khan

Date: 08/07/2017

Class:- SE & BE

Contact Numbers: Sajid Ansari (9270000372) & Wasim Khan (8237860809)

Name and address of company / Organization :
Elite Versatile Education & Welfare Society, Azad chowk, Wadala Road, Nashik

Objectives: 1) To know various types of tools, techniques and method of cyber criminals and cyber Law

2) Give awarness of secure netbanking and safe transactions.

3) To know about the cyber crime against women.

Outcome: 1) Students aware with the various types of tools, techniques and method of cyber criminals and cyber Law.

2) Students understand the importance of secure net banking and safe transactions.

3) Students aware about the cyber crime against women.

Workshop on
C, C++ & Python
by Prof. A.R. Gaidhani & Prof. J.N. Rajole

Objectives:

a. Understanding the concepts of Programming languages.
b. Difference between all C, C++ and Python.
c. To Understand and solve the programming problems.

Outcomes:

Students of Second and Final year got the concepts of C, C++ & Python Programming language. To able to analyse different problems and to apply suitable algorithm and data structure. To use effective data strucures for solving various Computer Engineering problems.

The event was attended by 25 Students


C++ History

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1800-233-2714

by: Prof. J.sarkar