ARAI ACADEMY



LEARNING CENTRE

ARAI, over five decades, has provided its design and development expertise to the Indian automotive industry, focusing on the testing and evaluation of components and systems to meet national and international standards. ARAI strives to achieve international recognition in these areas. In keeping pace with the globalization of economy and business, ARAI continues to enlarge its scope of services to meet the requirements of automotive industries around the world.

In addition to utilizing state-of-the-art technology, laboratories and highly-skilled personnel, ARAI recognizes the need for skill development to meet the demands of the automotive industry, not just in India but across the globe.

ARAI has embarked upon a programme of building up human resources by commencing educational programme (Graduate, Post graduate & Doctoral) with specialization in Automotive Engineering. It has tied up with VIT University (Vellore), VELTECH University (Chennai), College of Engineering (Pune), Christ University (Bengaluru), University of Alabama (USA), Tennessee Tech University (USA), Loughborough University (UK) and Braunschweig University (Germany).

Brief summary of joint programmes is as follows:

| UNIVERSITY | PROGRAMMES | SPECIALIZATION | DURATION | NO. OF SEATS | |
|---|--|---|-----------|-----------------|--|
| VIT, Vellore www.vit.ac.in | B. Tech. | Mechanical Engineering with specialization in Automotive Engineering | 4 years | 60 | |
| | M. Tech. | Automotive Engineering | 2 years | 60 | |
| | *M. Tech. (for Industry Professionals) | Automotive Engineering with specialization in Engine Technology | 2 years | 40 | |
| | | Powertrain Electronics | 2 years | 40 | |
| | | Manufacturing & Industrial Engineering | 2 years | 40 | |
| | | *Following companies have collaborated with ARAI to admit their engineers for M. Tech Programme while continuing their work: Ashok Leyland, Cummins, Eaton, Magna Steyr, Mahindra & Mahindra, TACO-Hendrickson, Tata Motors, Woodward | | | |
| | Ph.D. | Automotive Engineering | 3/6 years | 10 | |
| Vel Tech, Chennai www.vel-tech.org | B. Tech. (in association with GARC, Chennai) | Mechanical Engineering with specialization in Automotive Engineering | 4 years | 60 | |
| | M. Tech. | I. C. Engines | 2 years | 30 | |
| | | Electronics Engineering with specialization in Automotive Electronics | 2 years | 25 | |
| College of Engineering, Pune www.coep.org.in | M. Tech. | Automotive Technology | 2 voors | 36 | |
| Alabama Birmingham, USA <u>www.uab.edu</u> | M. S. | Mechanical Engineering with Automotive Engineering Emphasis | 2 years | | |
| Christ University www.christuniversity.in | B Tech | Automobile Engineering | 4 Years | 60 | |

For further information and registration, please visit respective University website or contact **Mr. N. A. Sakle**, Manager, ARAI Academy at 02135-396670 or sakle.pga@araiindia.com. For placement of students, companies may like to contact **Mr. N. A. Sakle**, Manager, ARAI Academy at 02135-396670 or sakle.pga@araiindia.com.

KNOWLEDGE CENTRE

It has collection of around 24,600 books, standards, project reports, seminar/conference proceedings and around 75,000 SAE technical papers. It also has 450 eBooks. It subscribes to 40 national and international journals. It regularly publishes a monthly magazine 'Automotive Abstracts'. It also conducts literature / patent search for customer's projects.

To become a member of Knowledge Centre or to subscribe for Automotive Abstracts, please contact Mrs. S. S. Das, Manager, Knowledge Centre on (020) 30231192 or das.lib@araiindia.com and Dr. Madhav Rao, Deputy Manager, Knowledge Centre-FID on (02135) 396685 or madhavrao.lib@araiindia.com.

TRAINING CENTRE

In line with Graduate, Post Graduate and Doctoral Programs conducted by various universities abroad, ARAI Academy has devised various Proficiency Improvement Programmes (PIPs), to be taught by ARAI, academia & industry experts. Based on the present system in universities, credits are proposed for each module, so that the graduate engineers can attend various modules and sum-up the credits required for Master's or Doctoral Programs. Participants also get chance to visit related laboratories of ARAI and get hands on experience. Certificates are issued on the basis of written test conducted at the end of the programme. We also conduct training programmes through eLearning, WEBEX and Domain Training Programmes for automotive industry at their preferred sites. ARAI has started developing web based eLearning Courses popularly known as 'ePIPs' (eLearning Proficiency Improvement Programmes) on various Automotive Engineering domain. ePIPs are highly engaging and effective eLearning modules, in which the licenced users can learn the subject matter online and gain practical as well as theoretical knowledge at their own pace, using a wide range of digital devices, anytime and anywhere.

PROFICIENCY IMPROVEMENT PROGRAMMES (PIPs)

| TITLE OF THE COURSE | DATE | DURATION IN DAYS | VENUE | PROPOSED PARTNER/S |
|---|---|--|----------------------------------|--------------------|
| Basic & Advances in Heat Treatments | 29 th – 31 st Aug 18 | 03 | ARAI FID | ASM, Pune |
| Advanced Fuels-Technology & Regulations | 4 th – 6 th Sept 18 | 03 | ARAI FID | |
| Engine Combustion and Simulation | 10 th – 12 th Sept 18 | 03 | ARAI FID | |
| Automotive Research & Development | 17 th – 19 th Sept 18 | 03 | Pillai College of Engg (PCoE) | PCoE, New Panvel |
| Design for Manufacturability | 25 th – 27 th Sept 18 | 03 | ARAI FID | |
| Fuel Cell Vehicles: Potential Power Source for Future (Blended) | 27 th – 28 th Sep 18 | 02 | ARAI FID | |
| Electric Vehicle Design & Validation | 09 th – 12 th Oct 18 | 04 | ARAI FID | |
| Automotive NVH | 24 th - 26 th Oct 18 | 03 | ARAI FID | |
| Forging Technology | 29 th – 31 st Oct 18 | 03 | ARAI FID | |
| ECU & Diagnostics | 22 nd – 23 rd Nov 18 | 02 | ARAI FID | |
| Automotive Testing and Certification | 28 th – 30 th Nov 18 | 03 | ARAI FID | |
| Connected & Autonomous Mobility | 5 th – 7 th Dec 18 | 03 | ARAI FID | |
| Vehicle Drivelines | 10 th – 12 th Dec 18 | 03 | ARAI FID | |
| Failure Analysis (including Engine components) | 12 th – 14 th Dec 18 | 03 | ARAI FID | ASM, Pune |
| Engine Testing & Certification | 17 th -21 st Dec 18 | 05 | ARAI FID | , |
| Tool Engineering | 03 rd – 04 th Jan 19 | 02 | ARAI FID | ASM, Pune |
| Engine Electronics & Management Systems (Blended) | 07 th – 11 th Jan 19 | 05 | ARAI FID | , |
| Industrial Safety (Blended) | 24 th – 25 th Jan 19 | 02 | ARAI FID | TACO |
| Embedded System for Automotive Application | 6 th – 8 th Feb 19 | 03 | ARAI FID | |
| Engine Emissions & Control (Blended) | 18 th – 22 nd Feb 19 | 05 | ARAI FID | |
| CQI 9: For the Heat treators | 28 th Feb 19 | 01 | ARAI FID | ASM, Pune |
| Engine Design & Development | 15 th – 19 th Apr 19 | 05 | ARAI FID | 7.5141, 1 dile |
| Metallurgy for Non-metallurgists | 24 th – 26 th Apr 19 | 03 | ARAI FID | ASM, Pune |
| Vehicle & Engine Testing | 16 th -17 th May 19 | 02 | ARAI FID | ASIVI, I UIIC |
| Foundry Technology | 5 th – 6 th Jun 19 | 02 | ARAI FID | ASM, Pune |
| Automotive NVH | 12 th – 14 th Jun 19 | 03 | ARAI FID | ASIVI, I UIIC |
| Automotive Engineering | 17 th – 21 st Jun 19 | 05 | ARAI FID | |
| Powertrain Engineering | 01 st - 04 th Jul 19 | 04 | ARAI FID | |
| Basic & Advances in Heat Treatments | 28 th – 30 th Aug 19 | 03 | ARAI FID | ASM, Pune |
| Forging Technology | 09 th – 11 th Oct 19 | 03 | ARAI FID | ASIVI, FUITE |
| Failure Analysis (including Engine components) | 11 th – 13 th Dec 19 | 03 | ARAI FID | ASM, Pune |
| Tool Engineering | 02 nd – 03 rd Jan 20 | 02 | ARAI FID | ASM, Pune |
| | 28 th Feb 20 | 01 | | i i |
| CQI 9 : For the Heat treators | | 03 | ARAI FID | ASM, Pune |
| Automotive EMI & EMC | To be decided | | ARALEID | |
| Geometrical Dimensioning & Tolerancing | To be decided | 02 | ARAI FID | ACAA Dares |
| Corrosion Engineering | To be decided | 02 | ARAI FID | ASM, Pune |
| Design Failure Mode Effect Analysis | To be decided | 02 | ARAI FID | |
| Design & Analysis of Experiments | To be decided | 02 | ARAI FID | |
| Quality and Reliability Engineering | To be decided | 02 | ARAI FID | |
| Automotive Materials & Manufacturing | To be decided | 03 | ARAI FID | |
| Advance Material & Characterization | To be decided | 03 | ARAI FID | |
| Hybrid Drives, Traction & Controls | To be decided | 03 | ARAI FID | |
| Corporate Success through Systematic Innovation | To be decided | 02 | ARAI FID | |
| e-PROFICIENCY | IMPROVEMENT PROG | RAMMES (ePIPs) | | |
| Reliability Engineering | Anytime | Course access-3 months Course time – 5 hrs. | Anywhere (Internet based) | |
| Engine Electronics and Management System (EEMS) | Anytime | Course access - 3 months Course time – 15 hrs. | Anywhere (Internet based) | RBEI |

 $Note: ARAI\ reserves\ the\ rights\ to\ change\ the\ dates,\ schedule,\ contents,\ speakers,\ venue,\ etc.\ for\ the\ programme\ without\ any\ notice.$