

# 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
<b>VIT, Vellore</b> <a href="http://www.vit.ac.in">www.vit.ac.in</a>	B. Tech.	Mechanical Engineering with specialization in Automotive Engineering	4 years	60
	M. Tech.	Automotive Engineering	2 years	50
	*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	
<b>Vel Tech, Chennai</b> <a href="http://www.vel-tech.org">www.vel-tech.org</a>	M. Tech.	I. C. Engines	2 years	30
		Electronics Engineering with specialization in Automotive Electronics	2 years	25
<b>College of Engineering, Pune</b> <a href="http://www.coep.org.in">www.coep.org.in</a>	M. Tech.	Automotive Technology	2 years	36
<b>Alabama Birmingham, USA</b> <a href="http://www.uab.edu">www.uab.edu</a>	M. S.	Mechanical Engineering with Automotive Engineering Emphasis		
<b>Christ University</b> <a href="http://www.christuniversity.in">www.christuniversity.in</a>	B Tech	Automobile Engineering	4 Years	60

For further information and registration, please visit respective University website or contact **Dr. S. A. Patil**, DGM, ARAI Academy at 020-30231243 or [sapatil.pga@araiindia.com](mailto:sapatil.pga@araiindia.com). For placement of students, companies may like to contact Mr. Avinash Kulkarni, Manager, ARAI Academy at 020-30231242 or [kulkarni.pga@araiindia.com](mailto:kulkarni.pga@araiindia.com).

## KNOWLEDGE CENTRE

It has collection of around 23,000 books, standards, project reports, seminar/conference proceedings and around 75,000 SAE technical papers. It also has 237 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. Knowledge Centre offers membership: Option 1- for reference only, Option 2 – with book borrowing facility.

To become a member of Knowledge Centre or to subscribe for Automotive Abstracts, please contact **Mrs. S. S. Das**, Manager, Knowledge Center on 020-3023 1192 or [das.lib@araiindia.com](mailto:das.lib@araiindia.com)

For more details, proposals & partnership please contact: **Dr. K. C. Vora, Sr. Dy. Director & Head, ARAI Academy** at [vora.pga@araiindia.com](mailto:vora.pga@araiindia.com)

ARAI: The Automotive Research Association of India, S.No.102, Vetal Hill, Off Paud Road, Kothrud, Pune-411 038.

ARAI FID: ARAI Forging Industry Division, Plot No. B-16/1, MIDC, Chakan, Taluka Khed, Pune-410 501. Ph: 02135-259595 / 259042 / 259044

## 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
Product Design and Life Cycle Management	19 <sup>th</sup> – 23 <sup>rd</sup> Jun 17	05	ARAI FID	
Automotive Engineering	19 <sup>th</sup> – 21 <sup>st</sup> Jun 17	03	ARAI	
Basic + Advanced Automotive Engineering	19 <sup>th</sup> – 30 <sup>th</sup> Jun 17	12	ARAI & Germany	AutoSol, Technical University, Chemnitz, Germany, Indo-Euro Synchronization, German Center for advanced Engineering and Management Studies
Excellence through Quality	28 <sup>th</sup> - 30 <sup>th</sup> Jun 17	03	ARAI FID	TACO
Engine Testing & Certification	03 <sup>rd</sup> – 07 <sup>th</sup> Jul 17	05	ARAI	AVL
Powertrain Engineering	10 <sup>th</sup> – 14 <sup>th</sup> Jul 17	05	ARAI	
Impact testing: A tool to gain early part performance	17 <sup>th</sup> - 18 <sup>th</sup> Jul 17	02	ARAI FID	Instron
Basics & Advances in Heat Treatment	19 <sup>th</sup> - 21 <sup>st</sup> Jul 17	03	ARAI FID	ASM International, Pune
Impact Biomechanics and Injury Criteria for the Assessment of Advanced Automotive Safety Systems	9th - 10th Aug 17	02	ARAI	IICAE, Indore
Futuristic Automotive Engineering	17 <sup>th</sup> - 19 <sup>th</sup> Aug 17			Kumaraguru College of Technology, Coimbatore (KCT)
New Product Development	21 <sup>st</sup> - 22 <sup>nd</sup> Aug 17	02	ARAI FID	India NPD School
Professional Development for Engineers	28 <sup>th</sup> Aug – 01 <sup>st</sup> Sep 17	05	ARAI FID	
Advanced Material Characterization	11 <sup>th</sup> – 15 <sup>th</sup> Sept 17	05	ARAI FID	
Automotive Fuels & Energy	11 <sup>th</sup> – 15 <sup>th</sup> Sept 17	05	ARAI	
Systems Engineering	18 <sup>th</sup> – 22 <sup>nd</sup> Sept 17	05	ARAI	Cummins
Quality & Reliability Engineering	18 <sup>th</sup> – 22 <sup>nd</sup> Sept 17	05	ARAI FID	
Automotive Sensors & Actuators	26 <sup>th</sup> – 28 <sup>th</sup> Sept 17	03	ARAI	
Connected Vehicles	4 <sup>th</sup> - 6 <sup>th</sup> Oct 17	03	ARAI	
Design of Vehicle Drivelines	30 <sup>th</sup> Oct – 03 <sup>rd</sup> Nov 17	05	ARAI	
Human Factor Engineering	30 <sup>th</sup> Oct – 03 <sup>rd</sup> Nov 17	05	ARAI-FID	
Powertrain NVH	06 <sup>th</sup> – 10 <sup>th</sup> Nov 17	05	ARAI	
QFD and DFMEA	14 <sup>th</sup> - 17 <sup>th</sup> Nov 17	04	ARAI FID	India NPD School
Failure Analysis (Including Engine components Failures)	13 <sup>th</sup> – 15 <sup>th</sup> Dec 17	03	ARAI FID	ASM, Pune
Engine Emissions & Control	08 <sup>th</sup> – 12 <sup>th</sup> Jan 18	05	ARAI	ECMA
Automotive Functional Safety	15 <sup>th</sup> – 19 <sup>th</sup> Jan 18	05	ARAI	
Road Safety	16 <sup>th</sup> - 17 <sup>th</sup> Jan 18	02	ARAI FID	TACO
Engine Electronics & Management System	29 <sup>th</sup> Jan – 02 <sup>nd</sup> Feb 18	05	ARAI	
Geometrical Dimensioning & Tolerancing	15 <sup>th</sup> - 16 <sup>th</sup> Feb 18	02	ARAI FID	NTTF, Bangalore
Design & Analysis of Experiments	19 <sup>th</sup> – 23 <sup>rd</sup> Feb 18	05	ARAI FID	
POSH	07 <sup>th</sup> Mar 18	01	ARAI FID	TACO
Industrial Safety	08 <sup>th</sup> - 09 <sup>th</sup> Mar 18	02	ARAI FID	TACO
Hybrid Drives, Traction & Controls	02 <sup>nd</sup> – 06 <sup>th</sup> Apr 18	05	ARAI	
Engine Design & Development	16 <sup>th</sup> – 20 <sup>th</sup> Apr 18	05	ARAI	
Product Design and Life Cycle Management	23 <sup>rd</sup> – 27 <sup>th</sup> Apr 18	05	ARAI FID	
Engine Control Systems	23 <sup>rd</sup> – 27 <sup>th</sup> Apr 18	05	ARAI	
Professional Development for Engineers	18 <sup>th</sup> – 22 <sup>nd</sup> Jun 18	05	ARAI FID	
Automotive Engineering	18 <sup>th</sup> – 22 <sup>nd</sup> Jun 18	05	ARAI	
Engine Testing & Certification	09 <sup>th</sup> – 13 <sup>th</sup> Jul 18	05	ARAI	AVL
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Advanced Material Characterization	25 <sup>th</sup> – 29 <sup>th</sup> Sept 18	05	ARAI FID	
Automotive Fuels & Energy	25 <sup>th</sup> – 29 <sup>th</sup> Sept 18	05	ARAI	
Automotive Sensors & Actuators	08 <sup>th</sup> – 12 <sup>th</sup> Oct 18	05	ARAI	
Human Factor Engineering	08 <sup>th</sup> – 12 <sup>th</sup> Oct 18	05	ARAI FID	
Design of Vehicle Drivelines	22 <sup>nd</sup> – 26 <sup>th</sup> Oct 18	05	ARAI	
Engine Electronics & Management Systems	07 <sup>th</sup> – 11 <sup>th</sup> Jan 19	05	ARAI	
Engine Emissions & Control	18 <sup>th</sup> – 22 <sup>nd</sup> Feb 19	05	ARAI	
Automotive Functional Safety	25 <sup>th</sup> Feb – 01 <sup>st</sup> Mar 19	05	ARAI	
Design & Analysis of Experiments	25 <sup>th</sup> Feb – 01 <sup>st</sup> Mar 19	05	ARAI FID	
Systematic Thinking	To be decided	03	ARAI FID	TRIZ Asia

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

**For further information & registration of Training Programmes, please contact Mr. Rajesh Patil, Manager, ARAI Academy at 020-30231245/48/39 or [patil.pga@araiindia.com](mailto:patil.pga@araiindia.com); [training.pga@araiindia.com](mailto:training.pga@araiindia.com); [training.fid@araiindia.com](mailto:training.fid@araiindia.com)**