

LEADERSHIP & ENGINEERING ACCELERATED DEVELOPMENT (LEAD)

Empowering the Future of Energy







Accelerated Competency
Transformation for Engineers

Empowering the Future of Energy







Accelerated Competency Transformation for Engineers (ACT-Eng.) is EnergyTech's flagship training program for engineers. Its objectives, content and structure are made to address the critical challenge of preparing young engineers for the real work environment and job skills needs. The strong partnership with IFP Training makes the program's success possible. The strength of both EnergyTech and IFP training enabled the program to grow and sustain within a challenging business environment.

ACT-Eng. (Accelerated Competency Transformation for Engineers) is an innovative program specifically crafted for engineers with less than five years of experience in the various petroleum industries. The program is designed to accelerate competency and enhance overall skill sets, It offers a unique opportunity for young engineers to refine their expertise in various disciplines while delving into leadership and economics realms.

One of the program's key features is its immersive learning environment, where participants have access to seasoned industry trainers within their respective fields. This exposure allows them to glean insights, strategies, and practical knowledge directly from industry experts, thereby fostering a robust learning experience.

A hallmark of ACT-Eng. is its collaborative nature, as engineers from diverse disciplines across leading companies in the petroleum industry come together. This intermingling of minds facilitates rich exchanges of ideas, perspectives, and best practices, enriching the learning journey that spans over one year with 12 modules covering various areas of the industry with a dynamically updated curriculum for all involved.

Throughout the program, participants engage in various learning activities, including miniprojects, on-the-job case development, and examinations. These components solidify the knowledge gained, providing practical application opportunities and reinforcing core concepts.

In essence, ACT-Eng. represents a comprehensive approach to professional development, offering young engineers a platform to accelerate their growth, expand their skill sets, and forge valuable connections within the dynamic landscape of the petroleum industry.

Practical Learning, Efficient Execution and Timely Offering are three promises of the ACT-Eng. Program ...



ABOUT THE PROGRAM

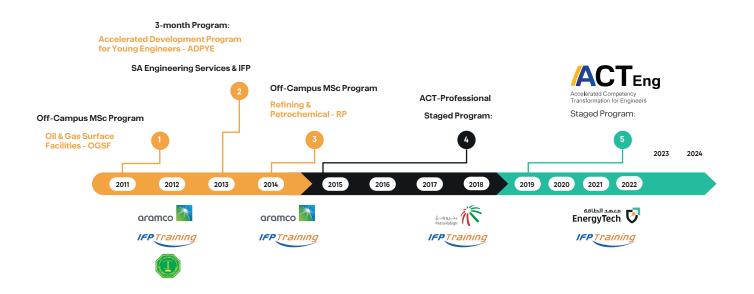
The Accelerated Competency Transformation for Engineers (ACT-Eng.) is an intense learning program designed to accelerate the development of young engineers with relatively few years of work experience (less than 5 years), and on exceptions for others who may have missed the opportunity to acquire the required skills timely. It is structured to be:

- . Mostly practical but rich with theoretical content, thus bringing theory into practice.
- . Introductory learning of business acumen, soft skills, and safety essentials.
- . Suitable for multiple engineers' disciplines within a specific industry, i.e. Mechanical, Chemical and Electrical working in a Refinery plant.
- . Rewarding with certificate of accomplishment and the opportunity to qualify for further development programs toward specialty and mastery levels.
- . The outcome is a well-rounded 'plant engineer' with practical skills and technical knowledge on the plant's design, operation and maintenance fundamentals.

THE START

The program is rooted in the earlier start of over a decade ago by Saudi Aramco. Now, it is a mature and well established training program being offered by EnergyTech. The milestones of this progress are listed below and depicted in the following graph:

- . In **2011**, Saudi Aramco Jointly with KFUPM and IFP training launched an off camps MSc degree for Oil and Gas Surface Facilities (OGSF).
- . In **2013**, Saudi Aramco and IFP jointly introduced the Accelerated Development Program for Young Engineers (ADPYT).
- . In 2014, Saudi Aramco and IFP training initiated the Off Camps MSc Program for Refining & Petrochemical.
- . In **2015**, Petro Rabigh along with IFP training initiated the Accelerated Professional Program for Refining & Petrochemicals.
- . Finally, in **2019**, EnergyTech took full interest and formalized a strong partnership with IFP training to deliver and expand on scope and coverage under the current format and structure



THE PARTNERSHIP

EnergyTech is a reputable non-profit organization that provides high-quality training programs for the energy sector. Its primary goal is to cultivate and empower a proficient local workforce while also working towards increasing Saudization within the industry.

It is noted that IFP Training is an accredited reputable training provider with over 4 decades (including more than 10 years within KSA) experience in the Oil & Gas industry. Jointly, the two have established a strong commitment and clear vision to reformat the ACT-Eng. into a sustainable branded program with great interest and suitability to multiple organizations working within the petroleum energy industry.

PARTNERSHIP VALUE PROPOSITION



Partnership Principles



- . Operability
- . Training Structure
- . Programs Accreditations
- . 13-Vocational Diploma
- . Training Administration Excellence
- . Quality & Governance
- . Sponsors Realtions
- . Facilities
- . Certification Capability
- . OJT & HR Services
- Local Vocational Training Provider



Specialty



Sustainability



Quality



Global Leadership



Excellence

- . Accredited Program
- . Experience/ Know-How
- . Certification
- Technology / Licensing Training
- . Technical Engineering Specialty
- . Mentorship
- . Global Training Providers
- Access to World Class Sponsorship
- . Petrochemicals



ACT-ENG. BENEFITS

ACT-Eng. program is expected to achieve the following benefits for sponsors and engineers:

For sponsoring companies:

- . Provide a structured training program
- . Share best practices
- . Reduce cost
- . Increase employee retention
- . Improve plant reliability & efficiency
- . Reduce administration workload
- . Conduct a third-party assessment
- . Familiarize engineer with their job role
- . Expand on operational and technical networking

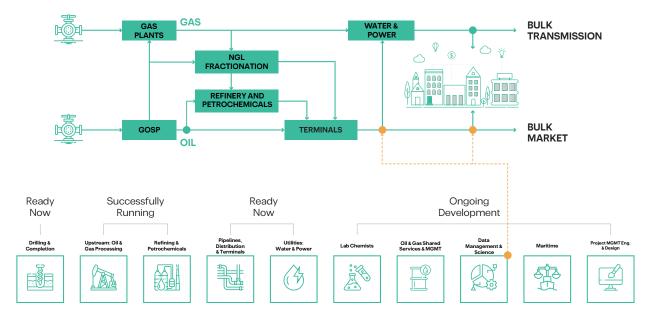
For Engineers:

- Provide accreditation and international certifications
- . Enable competency assessment
- . Accelerate development and experience
- . Provide motivation
- Provide mentorship and coaching
- . Enable hands-on through:
 - OJT and technical practices
 - Behavioral and skills practices

STRATEGY AND IMPLEMENTATION

The strategy aims to expand the program to address the full value chain of the petroleum industry as shown in Figure 1. From the well-established ACT-Eng. programs shown in the figure below, the Refining & Petrochemical Program was the first to be launched under the brand of ACT-Eng. offered by EnergyTech and its partner IFP Training for one year (12-Modules).

full value chain



To cover the full value chain, a total of 10 separate programs are identified with plans and progress for each.

THE STRUCTURE

ACT-Eng. enforces the highest standards of quality and effectiveness. This is achieved through a focus on building the required skills and integrating projects that are job-specific for On the Job Training (OJT). The full learning experience is complemented by the use of simulation where applicable. All programs of ACT-Eng. apply the following standard format:

- **Learning through modules**: Each program consists of multiple modules (courses), typically a total of 12, but not necessarily the same number for all.
- Puts theory into practice: The collection of modules (courses) are rich in technical content and include significant practical learning through real plants data, doing exercises, and working as teams on projects
- . **Includes critical job skills**: Introduction to business acumen and soft skill practices as well as focus on safety are all integrated into the learning.
- . Away from the job site is limited: Each module represents an independent classroom teaching & training course that is delivered over one (1) week (5 consecutive workdays) within a single month. Participants will spend the remaining 3 weeks of the month back on their jobs being fully work productive, but will also work on a preassigned team project.
- Facilitated by SMEs: Each Module is delivered by a highly qualified subject matter expert who teach and coach the full classroom content and continue to coach and engage participants (individually and in teams) during their OJT tasks and project work.
- . **Skills are assessed and reassessed:** Participants will undergo quizzing, examination, and project presentations to demonstrate that the required companies are acquired.



REFINING & PETROCHEMICALS PROGRAM



MOD-01: Applied
Thermodynamics – Separation
Processes – Distillation
(Design and Operation)



MOD-05: Heat Transfer – Heat Exchangers – Air coolers – Furnaces and Boilers



MOD-09: HSE in Process Operation – HSE during Maintenance and Construction Works



MOD-02: Refining Processes and Petroleum Products



MOD-06: Effective Leadership Skills MOD-06: Soft Skills



MOD-10: Equipment Sizing – Profitability Analysis of Projects



MOD-03: Steam Cracking – Olefins Production – Polymerization – Major Petrochemical Polymers



MOD-07: Fluid Flow – Centrifugal & Positive Displacement Pumps



MOD-11: Commodity Polymers Manufacturing



MOD-04: Instrumentation & Process Control - Electricity



MOD-08: Compressors -Steam Turbines - Turbo-Expanders - Gas Turbines



MOD-12: Maintenance Management – Reliability Control

UPSTREAM OIL & GAS PROGRAM



MOD-01: Applied
Thermodynamics – Separation
Processes – Distillation



MOD-05: Heat Transfer – Heat Exchangers – Air coolers – Furnaces and Boilers



MOD-09: HSE in Process Operation – HSE during Maintenance and Construction Works



MOD-02: Crude Oil & Water Processing



MOD-06: Effective Leadership Skills



MOD-10: Equipment Sizing – Profitability Analysis of Projects



MOD-03: Gas Processing & Conditioning



MOD-07: Fluid Flow – Centrifugal & Positive Displacement Pumps



MOD-11: Oil & Gas Field Development Project



MOD-04: Instrumentation & Process Control - Electricity



MOD-08: Compressors – Steam Turbines – Turbo-Expanders – Gas Turbines



MOD-12: Maintenance Management – Reliability Control

REFINING & PETROCHEMICALS LEARNING **OBJECTIVES**

VI.Refining & Petrochemicals

Moules (5 days ea.)

MOD-01: Fundamentals of Reservoir Engi-neering and Drilling – PVT Analysis – Applied Thermodynamics

MOD-02: Refining Processes and Petroleum

MOD-03: Steam Cracking – Olefins Produc-tion – Polymerization – Major Petrochemical Pólymers

MOD-04: Piping—Volve - Instrumentation & Process Control - Electricity

MOD-05: Heat Transfer – Heat Exchangers - Air coolers **Furnaces and Boilers**

MOD-06: Effective Leadership Skills

MOD-07: Fluid Flow - Centrifugal & Positive Displacement Pumps

MOD-08: Compressors – Steam Tur-bines – Turbo- Expanders - Gas Tur-

MOD-09: HSE in Process Operation. Maintenance and Construction

MOD-10: Equipment Sizing – Profitability

Analysis of Projects

MOD-11: Maintenance Management Reliability Control

MOD-12: Commodity Polymer Manufactur-

Learning Objectives

- Recall the fundamentals of PVT analysis and HC properties,
- Describe a typical wellhead and recognize main equipment,
- Recall basic HC properties and perform a material balance,
 Explain the practical aspects of hydrocarbon behavior in vapor-liquid equilibria,
 Explain the technology of distillation columns and describe the operating principle,
 control scheme and critical variables of a given distillation column.
- Recall the main refining processes, their aim as well as their feeds and products
- (quality and yield), Describe a typical PFD of the main Refining Units, and identify the Critical equipment, Give the typical Operating Conditions of each main refining unit, and list the Process Variables,
- List the main catalyst contaminants of catalytic processes, comment a refining scheme, and explain the interconnections.
 - List the main sources and outlets of olefinic and aromatic compounds,
 - Explain the manufacturing processes in the petrochemical industry, Describe a typical Steam Cracker PFD, and identify the Critical Equipment and their operating principle,
- List the specific hazards related to petrochemical plants, recall the petrochemicals industry's economic framework.
- Recall the technology and standards of piping equipment Explain the operating principles and technologies of the sensors and control valves, Describe the process control strategy, the PID controllers and their tuning and the
- advanced control systems,
- Describe the operating principle and the technology of electrical devices
- Recall the main heat transfer principles and laws, Describe the technology and operating principle of heat exchangers, air-coolers, furnaces, and boilers,
- Recall the TEMA Standards of heat exchangers,
 - Perform a summary design of a heat exchanger, Recall the safety issues relative to combustion thermal equipment
- - Put in practice the learned soft skill disciplines,
- Write better technical reports,
 Communicate efficiently with colleagues, customers and suppliers,
 Avoid pitfall situations, related to soft skills and emotional intelligence.
- Recall the fundamentals of hydrodynamics and friction loss calculations for piping

- Describe the technology of a typical pump,
 Recognize the ancillaries of a typical pump,
 Explain the technology and operating principle of main simple and double seals,
 Describe a typical operating procedure of a centrifugal of a positive displacement
- Recall the different types of compressors, Describe the technology of a typical centrifugal or reciprocating compressor, Recognize the auxiliaries of a typical compressor,
- Describe the technology of a steam turbine,
- Recall the different types of gas turbines, and describe their main technology.
- Identify and assess the risks inherent to the products handled, the equipment used and the operations implemented,
- Measure the possible consequences on the safety, the health and the environment,
- Apply preventive measures recommended,
- Adopt the most appropriate behavior towards risks, Promote safety practices and ensure safer work conditions and behavior.
- Recall the technology and standards of piping equipment,
- work with PID schemes, Size piping systems, used for different applications: gas, liquid, mixed flow. etc Perform the sizing of the main equipment present in processing facilities, Edit the design basis for relief systems,

- Evaluate the profitability of a project, based on the industry common KPI's.
- Evaluate the current trends in maintenance policy (TPM, RCM, ...) for a given case,
- Set goals in terms of both overall and corporate efficiency, Explain reliability analysis and improvement techniques, Set-up conditions for successful management of unit turnarounds,
- Implement a subcontracting policy.
- Explain the principles of polymerization techniques and the main characteristics of
- manufactured polymers,
 Describe the operating conditions of polymerization processes,
 Grasp the essence of plastics manufacturing and outlined

UPSTREAM OIL & GAS PROGRAM LEARNING OBJECTIVES

VI. Oil & Gas Program

| Moules (5 days ea.) | | <u>Learning Objectives</u> |
|--|------------------|--|
| MOD-01: Fundamentals of Reservoir Engineering and Drilling – PVT Analysis – Applied Thermodynamics | • | Recall the fundamentals of PVT analysis and HC properties, Describe a typical wellhead and recognize main equipment, Recall basic HC properties and perform a material balance, Explain the practical aspects of hydrocarbon behavior in vapor-liquid equilibria, Explain the technology of distillation columns and describe the operating principle, control scheme and critical variables of a given distillation column. |
| MOD-02: Crude Oil & Water Process | • | Recall the main specifications of crude oil, Describe a typical PFD of Oil degassing, dehydration/desalting and sweetening, and identify the Critical equipment, Give the typical Operating Conditions of each crude oil processing unit, and list the Process Variables, List the specific hazards related to oil Processing plants. |
| MOD-03: Gas Processing & Conditioning | • | List the main quality requirements for Sales Gas, Recall the main required treatments for natural gas, Describe a typical PFD of Gas Processing Units, and identify the Critical Equipment and their operating principle, Give the typical Operating Conditions of each gas processing unit, and list the Pro- cess Variables, List the specific hazards related to gas Processing plants |
| MOD-04: Instrumentation & Process Control – Electricity | • | Explain the operating principles and technologies of the sensors and control valves, Describe the process control strategy, the PID controllers and their tuning and the advanced control systems, Describe the operating principle and the technology of electrical devices |
| MOD-05: Heat Trans- fer – Heat Exchang- ers – Air coolers – Furnaces and Boilers | * * * * * | Recall the main heat transfer principles and laws, Describe the technology and operating principle of heat exchangers, air-coolers, furnaces, and boilers, Recall the TEMA Standards of heat exchangers, Perform a summary design of a heat exchanger, Recall the safety issues relative to combustion thermal equipment |
| MOD-06: Effective Leadership Skills | * * * | Put in practice the learned soft skill disciplines, Write better technical reports, Communicate efficiently with colleagues, customers and suppliers, Avoid pitfall situations, related to soft skills and emotional intelligence. |
| MOD-07: Fluid Flow — Centrifugal & Positive Displacement Pumps | * * * * | Recall the fundamentals of hydrodynamics and friction loss calculations for piping systems, Describe the technology of a typical pump, Recognize the ancillaries of a typical pump, Explain the technology and operating principle of main simple and double seals, Describe a typical operating procedure of a centrifugal of a positive displacement pump |
| MOD-08: Compressors – Steam Turbines – Turbo- Expanders – Gas Turbine | * * * * * | Recall the different types of compressors, Describe the technology of a typical centrifugal or reciprocating compressor, Recognize the auxiliaries of a typical compressor, Describe the technology of a steam turbine, Recall the different types of gas turbines, and describe their main technology. |
| MOD-09: HSE in Process Operation, Maintenance and Construction | * * * * * | Identify and assess the risks inherent to the products handled, the equipment used and the operations implemented, Measure the possible consequences on the safety, the health and the environment, Apply preventive measures recommended, Adopt the most appropriate behavior towards risks, Promote safety practices and ensure safer work conditions and behavior. |
| MOD-10: Piping & Valves – Equipment Sizing – Profitability Analysis of Projects | * * * * * * | Recall the technology and standards of piping equipment, work with PID schemes, Size piping systems, used for different applications: gas, liquid, mixed flow. etc Perform the sizing of the main equipment present in processing facilities, Edit the design basis for relief systems, Evaluate the profitability of a project, based on the industry common KPI's. |
| MOD-11: Mainte- nance Management Reliability Control | * * * * * | Evaluate the current trends in maintenance policy (TPM, RCM,) for a given case, Set goals in terms of both overall and corporate efficiency, Explain reliability analysis and improvement techniques, Set-up conditions for successful management of unit turnarounds, Implement a subcontracting policy. |
| MOD-12: Oil & Gas Field Development Project | * * * * | Recall the main data required for the development of an Oil & Gas Field, Explain the concepts necessary to decide for a development scheme, Explain the concepts to decide on Strategy of Production, Supply, Storage of Utilities, Simulate using Hysys an Oil and Gas Processing facilities, Design the main equipment required for an Oil and Gas Processing facility. |

MAIN REFERENCE MODEL



PIPING / VALVES

- API / ANSI / ASTM / ASME
- ISO / EN
- Piping Sizing: ASME B31.3



FIRED HEATERS

- Furnaces: API 560/ API RP573
- Tubes: API 530 /ISO 13704
- APH: API RP533
- Flares: API 521



VESSELS

- Dimensions: Typical Engineering Practices
- Pressure Vessels Sizing:
 ASME VIII
- Nozzles: API / ANSI
- Vessel Inspection: API RP572



INST. & PC

 International Society of Automation - ISA



PUMPS

- Cent.: API 610,685
- PDP: API 674,675,
- MS: API 682...



ASSET INTEGRIT

- Vessel Inspection: API RP572
- PZV: API 520



HEAT EXCL

- Shell & Tubes: API 660 TEMA / HEDH
- Plate: API 662
- Air Coolers: API661



COMP. & TURB.

- Axial/Cent.: API 617
- Recip.: API 618
- GT: API 619
- ST: API 611/612 • L&S Oil: API 614...



STORAGE TANKS

- Welded Tanks for Oil Storage: API 650
- Tank Inspection, Repair ...: API653



ACCOMPLISHMENTS

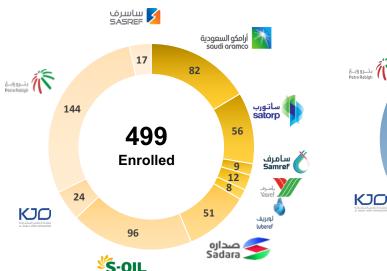
Since its inception, the program has successfully attracted 10 participating organizations and achieved an enrollment level over 499 participants. This includes 380 successful graduates (excluding the earlier phase under Petro Rabigh in 2015).

The strength of the program is amplified by the stature of its participating organizations, the like of Saudi Aramco, with its Vice President of Global Manufacturing being the sponsor of Refining & Petrochemical program, Petro Rabigh having enrolled the highest number of participants since inception and multiple other organizations with their sustained interest. Overall, participating organizations continued their interest, and nearly all have continued to enroll their engineers on successive sessions.











The year 2021 through the 1st half of 2022 was uniquely special for the following reasons:

- . Adopted and overcome the COVID-19 impact and started new cohort rollouts.
- . Introduced the South Korea based S-Oil as a a first international participating organization.
- . Launched the first Oil & Gas program for KJO.
- . Celebrated all years combined graduation.

The Refining and Petrochemicals (R&P) program has been successful from its inception. It captured immediate demand from multiple organizations with strong representation and the number of participants. Over the years of 2019, 2020 and 2021, a total of 186 engineers completed the R&P program and received their certificate of accomplishment.

The Oil & Gas (G&P) program was finalized and launched in March 2021 for a cohort representing Khafji Joint Operation (KJO). This was a first launch and a total of 16 participants completed all program requirements and were awarded their certification.





The Winner of the UK Learning Excellence Award 2024

ACT-Eng. positioned itself as a leading global training program by achieving the UK Learning Excellence Award for best engineer training, proofing the program's efficiency and solid structure.





7 GRADUATION CEREMONIES

International Graduation Ceremonies









In Kingdom Graduation Ceremonies













Abdullah Alghazal - 2nd

Civil and Structural Engineer at Sadara Chemical Company 2h • Edited • **⑤**

Three years ago, We were nominated to be enrolled in talent foundation program to promote our skills behaviorally and technically; in fact it was beyond that. As working with colleagues from different departments is a wonderful exchange of experiences. Indeed, petrochemical black boxes in the past did not and will not become so after today. All the credit goes to Sadara Chemical Company for giving this golden opportunity in which it is really impossible to thank, and inshallah the favor will be returned through what has been gained from such wonderful experience.

Thanks also to Saudi Petroleum Services Polytechnic (SPSP), IFP Training and all faculty members.



Osama AL-Shamrani · 2nd

Saudi Arabia- Dammam AL-Rawdhah District

الحمدلله ..

I am delighted to announce that I have officially graduated from Act-Eng 1-year SPSP program.

I was honored and proud to receive my certification from Suleman Albargan VP of Saudi Aramco Global Manufacturing today in the graduation ceremony. Special thanks also to S-Oil CEO Hussain AlQahtani & SASREF Engineering VP Fawzi Al-Somali Al-Somali for their encouragement & continous support throughout this journey.

Finally, I would like to thank SASREF, SPSP & IFP training for giving me this opportunity.



Salman Al-Johani - 2nd

Project Engineer at SAMREF Saudi Aramco Mobil Refinery Company Ltd.

1d • 10

اللهم لك الحمد حتى ترضى ولك الحمد اذا رضيت ولك الحمد بعد الرضا.

I have successfully completed with MERIT all the requirements for the one-year ACT-Eng Program (Graduate Certificate) in Refining & Petrochemicals.

All gratitudes go to SAMREF Saudi Aramco Mobil Refinery Company Ltd. executive management for giving us the opportunity to enroll in this intensive practical learning. Thanks Saudi Petroleum Services Polytechnic (SPSP) & IFP Training

#Spsp #ifp #refinery #petroleum



Almuhannad Basuni · 2nd

Process Control Engineer at SAMREF Saudi Aramco Mobil Refinery Company Ltd.

1d - Edited - ®

اللهم لك الحمد حتى ترضى ولك الحمد اذا رضيت ولك الحمد بعد الرضا. I'm pleased to become a certified Down-stream Engineer in Refining & Petrochemicals. Finally the hard work has paid off.

All gratitudes go to SAMREF Saudi Aramco Mobil Refinery Company Ltd. executive management for giving us the opportunity to enroll in this intensive practical learning Thanks Saudi Petroleum Services Polytechnic (SPSP) & IFP Training #Spsp #ifp



Saleh M Al-Ayedh · 3rd+
Instrument Maintenance Engineer at SASREF
1d · ©

.. الحمدلله

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Finally, I would like to thank SASREF, SPSP & IFP training for giving me this opportunity





Naif Alsalloom, CMRP · 2nd Reliability & Rotating Equipment Engineer 19h · ©

We proudly made it, we proudly achieved it, and we proudly graduated from the ACTEng program in Refining &Petrochemicals

IFP Training Saudi Petroleum Services Polytechnic (SPSP)



Abdulaziz Albuainain - 2nd

Maintenance Engineer at Sadara Chemical Company 1d - ©

I am glad to share the success story of completion of the ACT-Eng Program, one of the most knowledge-rich intensive programs which was offered by IFP Trainging in cordination with Saudi Petroleum Services Polytechnic institution.

Thanks for IFP organization and SPSP, and Special thanks for SADARA for investing in the development of their young Saudi Engineers.

Another milestone has been achieved.

#success #ACT-Eng #SPSP



Saad Alessa · 2nd

Production Engineer at Sadara Chemical Company 14h • Edited • S

With a great pleasure i have completed ACT ENG program as a certified graduate in refining and petrochemicals, thanks goes to Sadara Chemical Company for the opportunity, and for the Saudi Petroleum Services Polytechnic (SPSP) IFP Training training for their deduction and determination

GOING FORWARD

Sustainability and growth are important objectives, which are only possible by maintaining business relevance and continuous enhancements. The ACT-Eng. undergoes continuous reviews and enhancements to optimize delivery, enhance effectiveness and achieve greater participants satisfaction.

Expanding the program to include the other businesses within the full value chain (from well to consumer) is progressing at different development levels, depending on priority, interest and resources.

Examples of ongoing developments include the following:

Drilling & Completion: Fully developed and ready for rollout. The program was presented to most local operators of drilling and completion services and received a favorable review. A first session will be scheduled at the earliest opportunity, subject to participating organizations' readiness and interest.

Water & Power Utility: Ready for client review and rollout. It targets engineers working in the utility service sector of desalination, power generation and power transmission and distribution.

Data Science and Management: In its early development phase and is designed to address the well-established business direction, where data is becoming a valuable commodity and where all businesses have the need and the opportunity to capture it. It is envisioned to suit multiple disciplines and to satisfy all industries.

Sustainability & Green Energy: The subject of sustainability, green energy and energy transition are of great interest and priority. The program is in its very initial phase of scope definition. It aims to cover the various renewable energy resources of solar, wind and hydrogen technologies as well as other topics of relevance.

X. PROGRAM FEE

ACT-Eng. cost structure is built to ensure recovery and sustainable improvements, inclusive of all associated instructors' fees and the cost of the support staff, facilities, electronic and printed material, simulators, tools, logistics, and other miscellaneous expenses.

Quotation can be provided upon request

APPENDIX1

ACT-Eng. Graduation Ceremony

https://youtu.be/909ili4bAp0

ACT-Eng. Practical Solution Implementation (Cost Saving)

https://youtu.be/jOln9qyCex8

Testimonials - ACT-Eng. Program Graduates

https://youtu.be/3Rk12Ol51ml

ACT-Eng. Program Film

https://youtu.be/BF4nlqtNOyk

