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| **Institution:** | San Jacinto College | **Award Title:** | Associate of Applied Science Degree |
| **Program:** | Petrochemical Process Technology | **Award CIP Code:** | 41.0301 |

| **Chemical/Refining Process Technician Skill Standards****Key Activity #/Statement** | **Common Technical Core Curriculum Endorsed by the Gulf Coast Process Technology Alliance** |
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|  | Introduction to Process TechnologyPTAC 1302 | Process Instrumenta-tion IPTAC 1332/1432 | Process Technology I-EquipmentPTAC 1310/1410 | Process Technology II-SystemsPTAC 2420 | Process Technology III-OperationsPTAC 2438 | Principles of QualityPTAC 2314 | Safety, Health & Environment I PTAC 1308 | Process Trouble-shootingPTAC 2346/2446 |
|  1.1 Monitor and Regulate Distillation System |  |  |  |  | X |       |  |  |
| 1.2 Monitor and Regulate Stripping System  |  |       |  | X |       |       |  |  |
| 1.3 Monitor and Regulate Filtration System |  |   |  | X |  |   |  |  |
| 1.4 Monitor and Regulate Absorption System. |  |  |  | X |  |   |  |  |
| 1.5 Monitor and Regulate Adsorption System. |   |   |   | X |  |   |  |  |
| 1.6 Monitor and Regulate Extraction System. |   |   |   | X |  |   |  |  |
| 1.7 Monitor and Regulate Dehydration System. |   |   |   | X |  |   |  |  |
| 2.1 Monitor and Regulate Fired Heaters/Furnace System. |  |  | X |  |  |   |  |  |
| 2.2 Monitor and Regulate Boiler System. |  |  | X |  |  |   |  |  |
| 2.3 Monitor and Regulate Cooling Water System. |  |   | X |  |  |   |  |  |
| 2.4 Monitor and Regulate Refrigeration System. |   |   |  | X |  |   |  |  |
| 2.5 Monitor and Regulate Heat Exchanger System. |  |  | X |  |  |   |  |  |
| 3.1 Monitor and Regulate Continuous Reaction System.  |  |  |  |  | X |   |  |  |
| 3.2 Monitor and Regulate Batch Reaction System.  |  |  |  | X |  |   |  |  |
| 4.1 Monitor and Regulate Steam System. |  |  |  |  | X |   |  |  |
| 4.2 Monitor Electrical Generation/Distribution System. |  |  |  | X |  |   |   |   |
| 5.1 Monitor and Regulate Thermal Oxidation System. |   |   |   | X |   |   |   |   |
| 5.2 Monitor and Regulate Flare System.  |  |   | X |  |  |   |  |  |
| 5.3 Monitor and Regulate Storm Water System. |   |   |   | X |  |   |  |  |
| 5.4 Monitor and Regulate Waste Water System. |  |   |  | X |  |   |  |  |
| 6.1 Monitor and Regulate Instrument Air System. |  | X |  |  |  |   |  |  |
| 6.2 Monitor and Regulate Utility Air System. |   |  |  |  | X |   |  |  |
| 6.3 Monitor and Regulate Process Water System. |   |   |  | X |  |   |   |  |
| 6.4 Monitor and Regulate Potable Water System. |   |   |   | X |  |   |   |   |
| 6.5 Monitor and Regulate Fire Water System. |   |   |   | X |  |   |  |   |
| 6.6 Monitor and Regulate Service Water System. |  |   |  | X |  |   |   |   |
| 6.7 Monitor and Regulate Boiler Feed Water.  |  |  |  | X |  |   |  |  |
| 6.8 Monitor and Regulate Condensate System. |   |   |  | X |  |   |  |  |
| 6.9 Monitor and Regulate Natural Gas System. |  |  |  | X |  |   |  |  |
| 6.10 Monitor and Regulate Fuel Gas System. |  |  |  | X |  |   |  |  |
| 6.11 Monitor and Regulate Nitrogen System. |   |  |  | X |  |   |  |  |
| 7.1 Receive Chemical Materials. |   |   |  |  | X |   |  |  |
| 7.2 Store Chemical Materials. |   |  |  |  | X |   |  |  |
| 7.3 Transfer Chemical Materials. |  |  |  |  | X |   |  |  |
| 8.1 Diagnose Malfunction or Abnormality. |  |  |  |  |  |   |  | X |
| 8.2 Remedy Equipment/Process Malfunction. |   |  |  |  |  |   |  | X |
| 9.1 Conduct Preventative SHE Inspections. |   |   |   |  |  |  | X |  |
| 9.2 Conduct SHE Incident and Hazard Investigations. |   |   |   |  |  |  | X |  |
| 9.3 Instruct Individuals Entering Operating Area in SHE Policies and Procedures. |  |   |  |  |  |  | X |  |
| 9.4 Comply with Company Policies and Procedures. | X |   |  |  |  |  |  |  |
| 9.5 Comply with Local, State, and Federal Policies and Procedures.  |  |   |  |  |  | X |  |   |