

Steamfitters MES(HVAC) Journeyman Advancement Training Schedule 2017-18 (ver#1) email JATRegistration@lu420.com



2017	Monday		Tuesday		Wednesday		Thursday		
	Track 1	Track 2	Controls Track	Misc	Track 3	Track 4** (notes)	Refrig Track	Controls/Misc	Boiler\Bnrn Track
Week 1: 9/11 - 9/14	MESJ-101	TD-101	CT-101		MESJ-201	VRF-MIT	REF-103	AL4-101	BB-102
Week 2: 9/18 - 9/21						(also see AL-101)			
Week 3: 9/25 - 9/28									No Class
Week 4: 10/2 - 10/5			LU420 MTG: No Class						No Class
week 5: 10/9 - 10/12					MESJ-202A	MESJ-202W			(cont)
week 6: 10/16 - 10/19		MESJ-103						CTrid-100	
week 7: 10/23 - 10/26								AL-101	
week 8: 10/30 - 11/2									
week 9: 11/6 - 11/9	(Star 4:30-7:00) LU420 MTG/No Class		Election Day: No Class				REF-104		
week 10: 11/13 - 11/16	Star(5:00-8:00)								
week 11: 11/20 - 11/23	(5:00-8:00)		CT-102				Thanksgiving		
week 12: 11/27 - 11/30	(5:00-8:00)	MESJ-104							
week 13: 12/4 - 12/7	Star EXAM		LU420 MTG: No Class						
week 14: 12/11 - 12/14	PT-101								
week 15: 12/18 - 12/21			(cont)		(cont)	(cont)	(cont)		(cont)

Steamfitters MES(HVAC) Journeyman Advancement Training Schedule Spring 2018

2018	Monday		Tuesday		Wednesday		Thursday		
	Track 1	Track 2	Controls Track	Misc	Track 3	Track 4	Refrig Track	Controls/Misc	Boiler\Bnrn Track
week 16: 1/8 - 1/11	CP-101	MESJ-105	(cont)		(cont)	(cont)	(cont)		
week 17: 1/15 - 1/18									
week 18: 1/22 - 1/25					MESJ-205A	MESJ-205W	REF-105		
week 19: 1/29 - 2/1		MESJ-106						AL-101	BB-103
week 20: 2/5 - 2/8			LU420 MTG: No Class						
week 21: 2/12 - 2/15			CT-103	XX-***					
week 22: 2/19 - 2/22									
week 23: 2/26 - 3/1		MESJ-107							
week 24: 3/5 - 3/8	MESJ-102		LU420 MTG: No Class					AL-101	
week 25: 3/12 - 3/15		VFD-101							
week 26: 3/19 - 3/22									
week 27: 3/26 - 3/29									
week 28: 4/2 - 4/5			LU420 MTG: No Class						
week 29: 4/9 - 4/12	MESJ-ID-1	MESJ-ID-1						*PF-101*	
week 30: 4/16 - 4/19				XX-***					
week 31: 4/23 - 4/26	REF-Update	AL-101 (4 nites)							
week 32: 4/30 - 5/3			LU420 MTG: No Class						
week 33: 5/7 - 5/10									

Request Classes or information @ JATRegistration@LU420.com

Teardowns(Saturdays) to sign up email: JATRegistration@LU420.com

Please see flip side for course descriptions / nights credits, etc. *** Please watch for updates at LU420.com training page

2017-2018 Steamfitter Journeymen Training Course Descriptions

please check LU420.com Training page for Schedule & Course description updates
email JATRegistration@lu420.com with questions & to request courses



Track #1	
MESJ-101	Fundamentals for Journeymen Advanced Training
PT-101	Performance Testing Fundamentals for Airside & DX Unitary Systems
CP101	Basic Controls & Pnuematic (see description below)
MESJ-102	Motors, Starters & Diagrams, Circuit Protection, etc.
REF-Update	Overview & Safety use of various refrigerants in Refrifgeration related systems
MESJ-ID-1	course for to secure your future with the ability to Identify & Develop opportunities related to Track #1 & #2(credited nights for all / NOT required if ID-101 was completed)

Track #2	
TD-101	Teardown Fundamentals: Dimensions, Tolerances, Clearances & Fits along with the basic fundamentals of Rigging and Teardown Disassembly & Analysis
AL101	Hands on use of dimensions, tolerances & instruments & alignment of shafts including an overview/intro to reverse alignment, vibration & laser alignment.
MESJ-103	Fundamentals of Single & Double effect Absorption Chillers
MESJ-104	Centrifugal Chiller Fundamentals
MESJ-105	Centrifugal Chiller monthly & annual maintenance
MESJ-106	Chiller Microprocessor & controls fundamentals
MESJ-107	Oilless VFD compressors: Overview & Intro
VFD101	VFD Course is a new course combining the generic fundamentals of how PWM VFDs operate including semi-conductors, specific parameters of a couple of VFD brands installation requirements, start-up, commissioning & troubleshooting.
MESJ-ID-1	course for to secure your future with the ability to Identify & Develop opportunities related to Track #1 & #2(credited nights for all / NOT required if ID-101 was completed)

Track #3	
MESJ-201	Science & Physics fundamentals applicable to Start, Test & Balance
MESJ-202A	MESJ-202A Course includes intermediate training: Airside Start, Test & Balance
MESJ-205A	MESJ-205A Course Advanced Airside Start, Test & Balance

Track #4	
VRF101-MIT	Mitsubishi(City-Multi) Variable Refrigerant Flow ductless split systems
MESJ-202W	MESJ-202W Course includes intermediate training: Waterside Start, Test & Balance
MESJ-205W	MESJ-205W Course Advanced Waterside Start, Test & Balance

Boilers-Burners-Combustion, etc.	
BB101	BB101 Course Boiler-Burner & Combustion fundamentals Training, etc.
BB102	BB102 Course intermediate Boiler-Burner & Combustion Training, etc.
BB103	BB103 Course includes advanced Boiler-Burner & Combustion Training, etc.

Night Count Requirements for JAT's & Controls Courses	
Tracks#1-4 require JAT classes and others totaling of 31 nights each track.	
JAT-1: 62 nights JAT-2: 62 nights Saturday =2.5 nights	
Controls Track require CT-xxx classes and others total of 93 nights for EI(31),EII(31) & EIII(31)	

Please see flip side for 2017-18 Schedule

Controls	
CP101	Basic Controls & Pnuematic course is the prerequisite for the Controls courses and MESJ courses. Electric, Electronic, Pnuematic and basic PID control is covered with appropriate electrical fundamentals.
CTrid-100	Fundamentals of Tridium Base Control Systems
CT101	PRE-REQ: CP-101 Controls Intro includes history & hierarchy, generic hardware (INs & OUTs) & software(algorithms). An overview of Unitary & Programmable control types, Application Specific Controllers, and network communication.
CT102	PRE-REQ: CT-101 Application Specific Controllers(ASC) Unitary, Fan coil, RTU, AHU & Chiller controllers(Carrier & Johnson) incl. specific setup of I\O's, setpoints & schedules, demonstrate associated communication and commissioning software.
CT103	PRE-REQ: CT-102 Programmable Controllers programming blocks; on\off, PID, setpoints & schedules, min\max\avg algorithms, etc. System communication & commissioning and the demonstration of the associated software is included.
CT105-O	Tridium Operations is a short course exploring network controllers, creating and modifying schedules, and navigating and adjusting setpoints and parameters. Creating and viewing trends.
CT105-C	PRE-REQ: CT-103 Tridium Configuration overviews of requirements for Tridium Certification & the config. portion: installing Comm ports, uploading controllers, creation of database, graphics and a sample of custom programming
CT106	PRE-REQ: CT-105-O Intro\Overview to Honeywell Spider intro course: Spider Programmable Controllers: Real Time Internal Clock, Adap Integral Algorithm Integrated Actuator Option, Unitary & VAV Controller
CT107	Intro\Overview to Tracer is a short introductory course exploring Tracer controls.
CT108	Honeywell SpiderII : Level II training: the Spider family of Programmable Controllers
CT109	Tridium Advanced Configuration: Level III Training (CT105-O & 105-C prerequisites)
Refrigeration	
REF101	Commercial Refrigeration Cycles & Troubleshooting explores and compares real world and theoretical application and troubleshooting of the Pressure Enthalpy Cycle
REF102	Refrigeration Piping reviews the balance of oil return vs. pressure drop vs. efficiency as it relates to pipe sizing along with appropriate piping installation practices.
REF103	Commercial Refrigeration Part II explores components, refrigerant flow controls, and temperature control and defrost control of Commercial Refrigeration Systems
REF104	Supermarket Refrigeration provides an thorough overview of Rack Systems, unique operating conditions, Refrigerant & Oil Systems applied in Supermarket Refrigeration
REF105	Advanced Supermarket Refrigeration explores electronic valves, controls, secondary coolants(glycol), compound systems, CO2 Systems, efficiency considerations.
REF106	Refrigeration Energy Management System layout and programming, etc.
PF101	MESJ Pipefitting Fundamentals is a short course on pipe fitting fundamentals and fundamental math required for offsets, etc.
SS101	Steam Systems: Service & Troubleshooting Fundamentals is a new course geared towards srevice & troubleshooting and\or optimizing a customers facility. PRV's, traps, and condensate return systems will be explored.
STAR1	STAR1 Course includes review evenings to prepare for the UA HVAC STAR Cert including practice Exams and on the final night the proctored Certification EXAM
VRF101-DAIK	Daikin Variable Refrigerant Flow ductless split systems

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