

Steamfitters MES(HVAC) Journeyman Advancement Training Schedule 2016-17 (ver. #1) email JATRegistration@lu420.com



2016	Monday		Tuesday		Wednesday		Thursday		
	Track 1	Track 2	Controls Track	Misc	Track 3	Track 4	Refrig Track	Controls/Misc	Boiler\Bnr Track
Week 1: 9/12 - 9/15	MESJ-101	TD-101	CT-102	ID-101	MESJ-201	see Trk#4 notes*	REF-105	VRF-101-DAIK	BB-103
Week 2: 9/19 - 9/22						see ID-101			
Week 3: 9/26 - 9/29						see VRF-DAIK			
Week 4: 10/3 - 10/6			LU420 MTG: No Class						
week 5: 10/10 - 10/13		MESJ-103			MESJ-202A	MESJ-202W		CT-105-O	
week 6: 10/17 - 10/21									
week 7: 10/24 - 10/27									
week 8: 10/31 - 11/3	LU420 MTG: No Class		ELECTION: No Class						
week 9: 11/7 - 11/10	STAR-1		AL-101	AF-101					
week 10: 11/14 - 11/17									
week 11: 11/21 - 11/24			CT-103				Thanksgiving		
week 12: 11/28 - 12/1		MESJ-104						AL-101	BB-101
week 13: 12/5 - 12/8	STAR EXAM		LU420 MTG: No Class						
week 14: 12/12 - 12/15									
week 15: 12/19 - 12/22			(cont)		(cont)	(cont)			(cont)

Steamfitters MES(HVAC) Journeyman Advancement Training Schedule Spring 2017

2017	Monday		Tuesday		Wednesday		Thursday		
	Track 1	Track 2	Controls Track	Misc	Track 3	Track 4	Refrig Track		Boiler\Bnr Track
week 16: 1/9 - 1/12	CP-101	MESJ-105	(cont)	XX-***	(cont)	(cont)	REF-101	AL-101	(cont)
week 17: 1/16 - 1/19									
week 18: 1/23 - 1/26									
week 19: 1/30 - 2/2		MESJ-106			MESJ-205A	MESJ-205W			
week 20: 2/6 - 2/9			LU420 MTG: No Class						
week 21: 2/13 - 2/16				XX-***					
week 22: 2/20 - 2/23									
week 23: 2/27 - 3/2	AF-101	MESJ-107							
week 24: 3/6 - 3/9			LU420 MTG: No Class						
week 25: 3/13 - 3/16		XX-***	CT-101	AL-101				CT-***	
week 26: 3/20 - 3/23									
week 27: 3/27 - 3/30	MESJ-102	*Trk#2 notes							
week 28: 4/3 - 4/6			LU420 MTG: No Class						
week 29: 4/10 - 4/13		VFD-101							
week 30: 4/17 - 4/20				XX-***				*PF-101*	
week 31: 4/24 - 4/27									
week 32: 5/1 - 5/4			LU420 MTG: No Class						
week 33: 5/8 - 5/11									

Tracks #1 thru #4: 31 equivalent nites/track required for credit. See ID-101, VRF, AL-101, AF-101, REF & BB etc. XX-*** see Training page at LU420.com for updates!

* Track #2 Notes: 31 nites equiv/track req. Teardowns(Saturdays) & AL-101- 3nites(offered Tuesdays & Thursdays- see schedule \email: JATRegistration@LU420.com)

Track #4 Notes: 31 nites/track required for JAT completion: consider ID-101, VRF, AL-101, AF-101, REF-101 thru 105, BB-101 thru 103, PF-101 & Teardowns

Please see flip side for course descriptions *** Please watch for updates at LU420.com training page

2016-2017 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



AL101 AL101 Course includes hands on use of dimensions, tolerances & instruments and alignment of shafts including an introduction to reverse alignment

AF101 AF101 Course includes 2015 updates on Arc Flash safety into our Electrical Safety Training Program(Required sometime during Track 1 thru Track 4)

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.

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.

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)

CA500 Future:Airside CA500 & Hydronic HA500 Hands On "Balancing Certificate" Prereq: 205A\W
HA500 short course designed to solidify\validate skills for Start-ups, Analysis, & Balancing

ID101 ID101 Course is the course for those who want to secure their future with the ability to Identify & Develop opportunities. Establish yourself as a unreplaceable employee

MESJ-101	Fundamentals for Journeymen Advanced Training
MESJ-102	Motors, Starters & Diagrams, Circuit Protection, etc.
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	Oiless VFD compressors: Overview & Intro
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
MESJ-202W	MESJ-202W Course includes intermediate training: Waterside Start, Test & Balance
MESJ-205W	MESJ-205W Course Advanced Waterside Start, Test & Balance
TD-101	Teardown Fundamentals: Dimensions, Tolerances, Clearances & Fits along with the basic fundamentals of Rigging and Teardown Disassembly & Analysis

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.

REF107 Future: Introduction to Cascade & Ultra Low Temp
Please email JATRegistration@LU420.com if interested in this currciulum

REF109 Future: Overview\Intro Industrial Refig including NH3
Please email JATRegistration@LU420.com if interested in this currciulum

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

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.

VRF101-MIT Mitsubishi(City-Multi) Variable Refrigerant Flow ductless split systems

VRF101-DAIK Daikin Variable Refrigerant Flow ductless split systems

Tracks#1-4 require JAT (MESJ, AL, AF & TD)classes and others(BB,ID,REF,PF,VFD,VRF, etc.) total of 31 nights each track. Saturday =2.5 nights JAT-1: 62 nights JAT-2: 62 nights

Controls Track (CT-XXX) require CT-xxx classes and others(BB,ID,REF,PF,VFD,VRF, etc.) total of 93 nights for EI(31),EII(31) & EIII(31)

Please see flip side for 2016-17 Schedule

Please watch for updates at LU420.com training page