



SBE Education Survey Summary *September – October 2009*

Sent to 4173 members (*originally sent to 4465; 25 opted out, 267 emails bounced back*)
1002 respondents (24%); 848 of those completed the entire survey (20%)

96.6% of respondents said that continuing education is important to them.

74.5% of respondents are using SBE for their continuing education needs. 25.5% are not.

82.8% of respondents said their employers provide work time (at least sometimes) to participate in continuing education. 17.2% said employer does not.

67.5% of respondents said their employers cover costs (at least sometimes) to participate in continuing education. 32.5% said employer does not.

32% of respondents stated that they take 2-3 days of continuing education per year. 11% (102 respondents) said they take zero days of continuing education per year. That said, 89% of respondents take at least one day per year.

The most important factors in deciding whether or not to take a course were (1) quality and (2) relevant topic, followed by (3) ability to take course anytime, day or night, (4) cost, (5) available online, (6) location – near where I live, (7) meets (re)certification requirements, (8) course length and (9) recommended by another member, in that order.

Highest rated listed subjects includes: Digital Television, Digital Radio, Broadband Technologies, Broadcast Engineering Fundamentals, Broadcast Engineering Management, EAS, New Media Technologies, New Receiver and Transmitter Technologies, Data Broadcasting Technologies and Applications.

Members could list other topics of interest. One that seemed to keep coming up was IT.

Only 5% of respondents have taken a course on SBE University.

74% of respondents said they are considering taking an online course.

53.4% thought that SBE University is beneficial and valuable to them as a way to learn. 44.6% were indifferent (maybe due in part to having never taken a course through SBE University).

33.3% of respondents have attended an Ennes Workshop.

85.5% of respondents would consider going to an Ennes Workshop.

56% of respondents think that Ennes Workshops are valuable and beneficial to them as a way to learn. 42.8% were indifferent (maybe due in part to having never been to an Ennes Workshop).

95.1% of respondents thought it was at least 'Somewhat Important' for SBE to offer a leadership / management development course designed for broadcast engineers.

The top three factors people consider when deciding whether or not to attend the Leadership Development Course in order are: Location, followed by Registration Cost and Travel Costs. Course dates came in at a close 4th.

Days of the week that would be most convenient for members to attend the Leadership Development Course (3 day course): 36% said Friday, Saturday and Sunday, followed by 29.5% that said Tuesday, Wednesday and Thursday, and 28.8% that said Monday, Tuesday and Wednesday. 27.4% thought Wednesday, Thursday and Friday would be most convenient. 26.2% thought Saturday, Sunday and Monday would be most convenient. One could conclude that the weekday options (chosen by 764 respondents) were preferred over the options offering weekend days (chosen by 555 respondents).

Top months that respondents would be unavailable for this three-day course:

31.8% December

26% November

40% *said any month is fine*

Destinations respondents would consider traveling to for the Leadership Development Course:

28.3% (252) - Las Vegas

23.3% (208) - Chicago

20.6% (184) - Atlanta

20.2% (180) - Washington, D.C.

19.1% (170) - Indianapolis

76% of respondents said they have not attended a webinar such as the RF Safety Course.

93.7% said they would consider attending one in the future.

71% of respondents thought Webinars were beneficial and valuable to them as a way to learn.

26% were indifferent.

1.7% (15 ppl) do not think they are beneficial.

Time of day people prefer to participate in a webinar:

21.9% preferred the afternoon (Eastern)

18.6% preferred the morning (Eastern)

16.6% had no preference

In this question, 5 people commented that these should be recorded and available anytime.

Days of the week members would not be available for a live webinar:

45.3% noted Sunday

39.7% noted Saturday

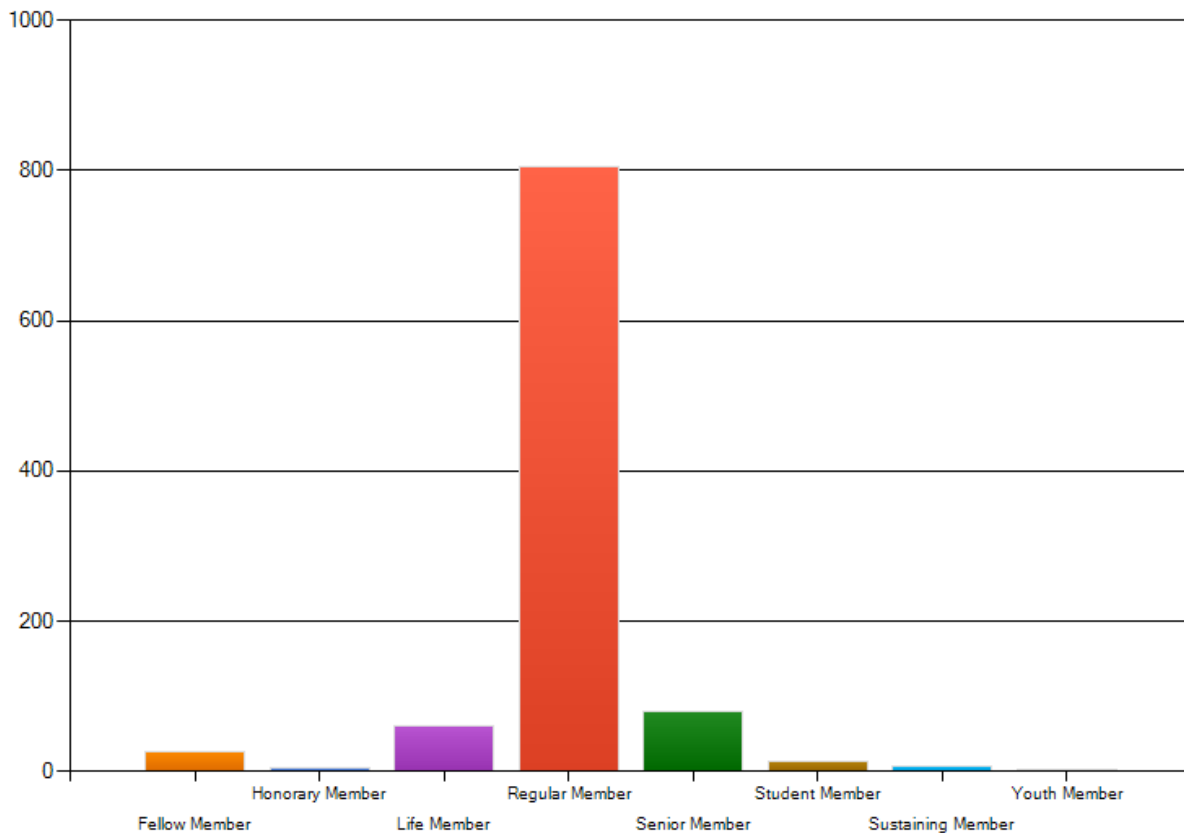
35.1% said any day is fine

Society of Broadcast Engineers Training and Development Survey

What type of membership do you hold with the Society of Broadcast Engineers?

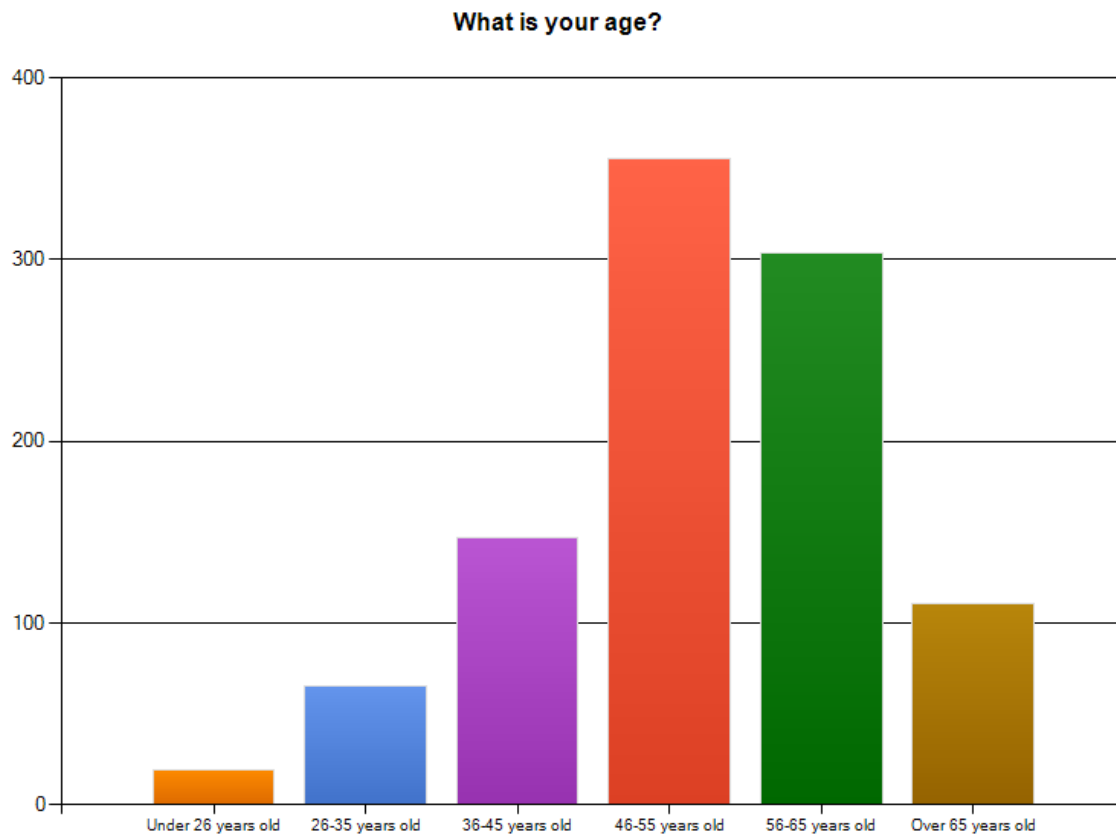
Answer Options	Response Percent	Response Count
Fellow Member	2.7%	27
Honorary Member	0.4%	4
Life Member	6.1%	61
Regular Member	80.4%	806
Senior Member	8.0%	80
Student Member	1.4%	14
Sustaining Member	0.7%	7
Youth Member	0.3%	3
<i>answered question</i>		1002
<i>skipped question</i>		0

What type of membership do you hold with the Society of Broadcast Engineers?



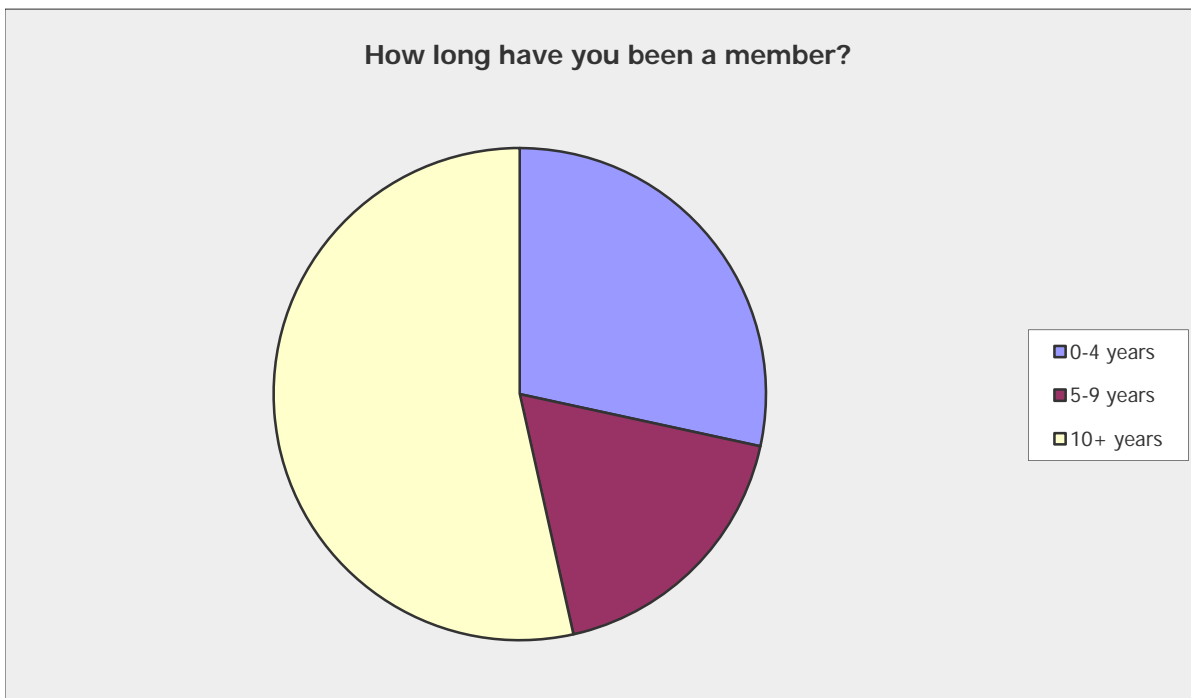
Society of Broadcast Engineers Training and Development Survey

What is your age?		
Answer Options	Response Percent	Response Count
Under 26 years old	1.9%	19
26-35 years old	6.5%	65
36-45 years old	14.7%	147
46-55 years old	35.5%	356
56-65 years old	30.3%	304
Over 65 years old	11.1%	111
<i>answered question</i>		1002
<i>skipped question</i>		0



Society of Broadcast Engineers Training and Development Survey

How long have you been a member?		
Answer Options	Response Percent	Response Count
0-4 years	28.4%	285
5-9 years	18.1%	181
10+ years	53.5%	536
<i>answered question</i>		1002
<i>skipped question</i>		0

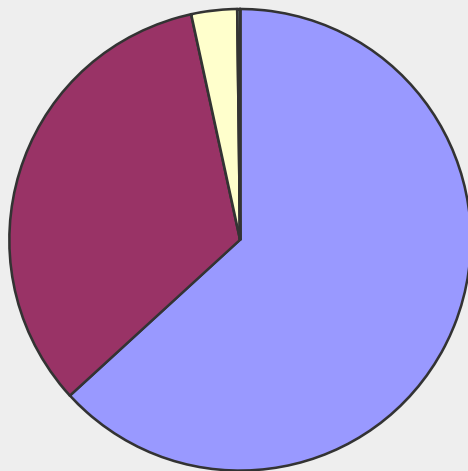


Society of Broadcast Engineers Training and Development Survey

Please indicate how much you agree with the following statement:
Continuing education and training are important to me.

Answer Options	Response Percent	Response Count
Strongly Agree	63.2%	578
Agree	33.4%	306
Neither Agree nor Disagree	3.2%	29
Disagree	0.2%	2
Stongly Disagree	0.0%	0
<i>answered question</i>		915
<i>skipped question</i>		87

Please indicate how much you agree with the following statement:
Continuing education and training are important to me.



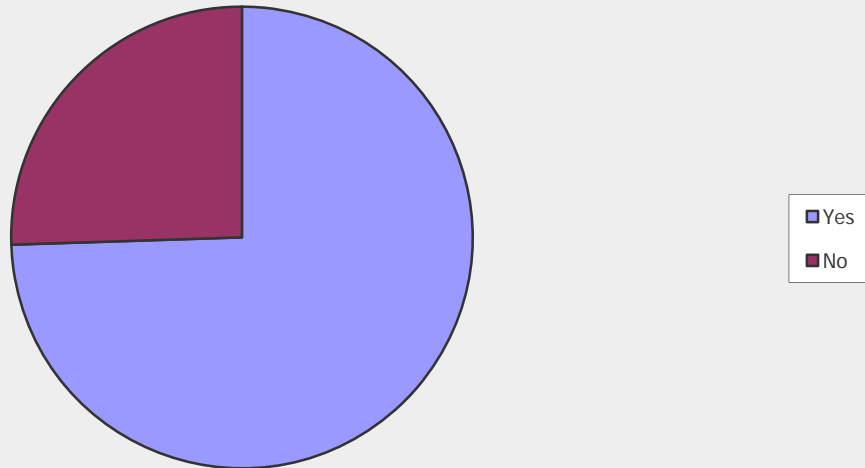
- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Stongly Disagree

Society of Broadcast Engineers Training and Development Survey

SBE is one of the resources I use to satisfy my continuing education and training needs.

Answer Options	Response Percent	Response Count
Yes	74.5%	682
No	25.5%	233
<i>answered question</i>		915
<i>skipped question</i>		87

SBE is one of the resources I use to satisfy my continuing education and training needs.

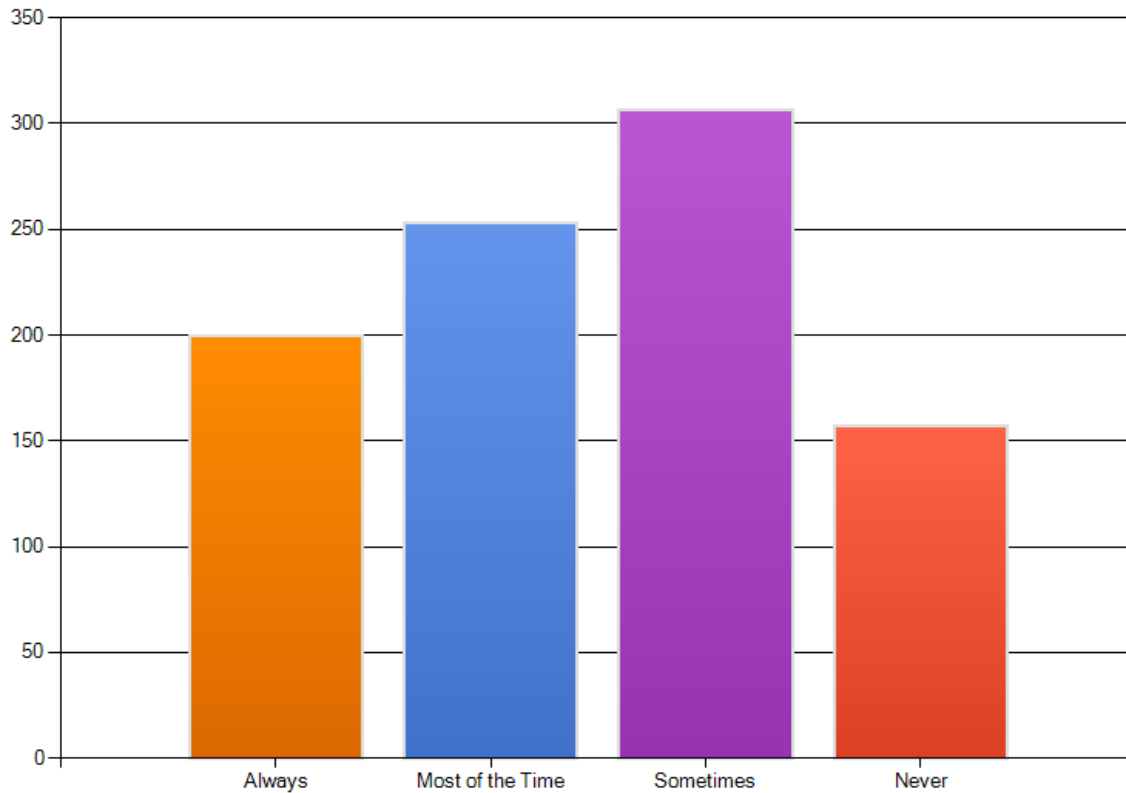


Society of Broadcast Engineers Training and Development Survey

My employer supports my continuing education needs by providing work time to attend.

Answer Options	Response Percent	Response Count
Always	21.7%	199
Most of the Time	27.7%	253
Sometimes	33.4%	306
Never	17.2%	157
<i>answered question</i>		915
<i>skipped question</i>		87

My employer supports my continuing education needs by providing work time to attend.

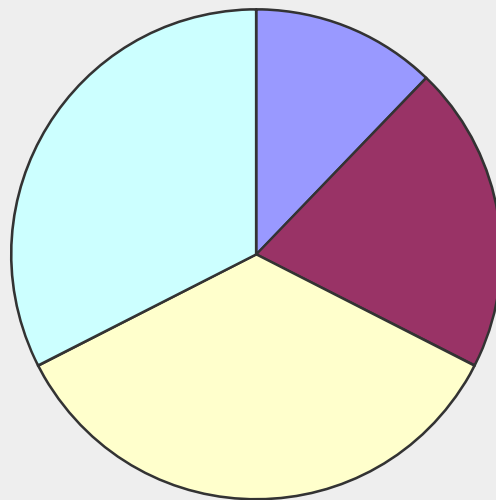


Society of Broadcast Engineers Training and Development Survey

My employer covers the costs related to my continuing education.

Answer Options	Response Percent	Response Count
Always	12.2%	112
Most of the Time	20.3%	186
Sometimes	35.0%	320
Never	32.5%	297
<i>answered question</i>		915
<i>skipped question</i>		87

My employer covers the costs related to my continuing education.

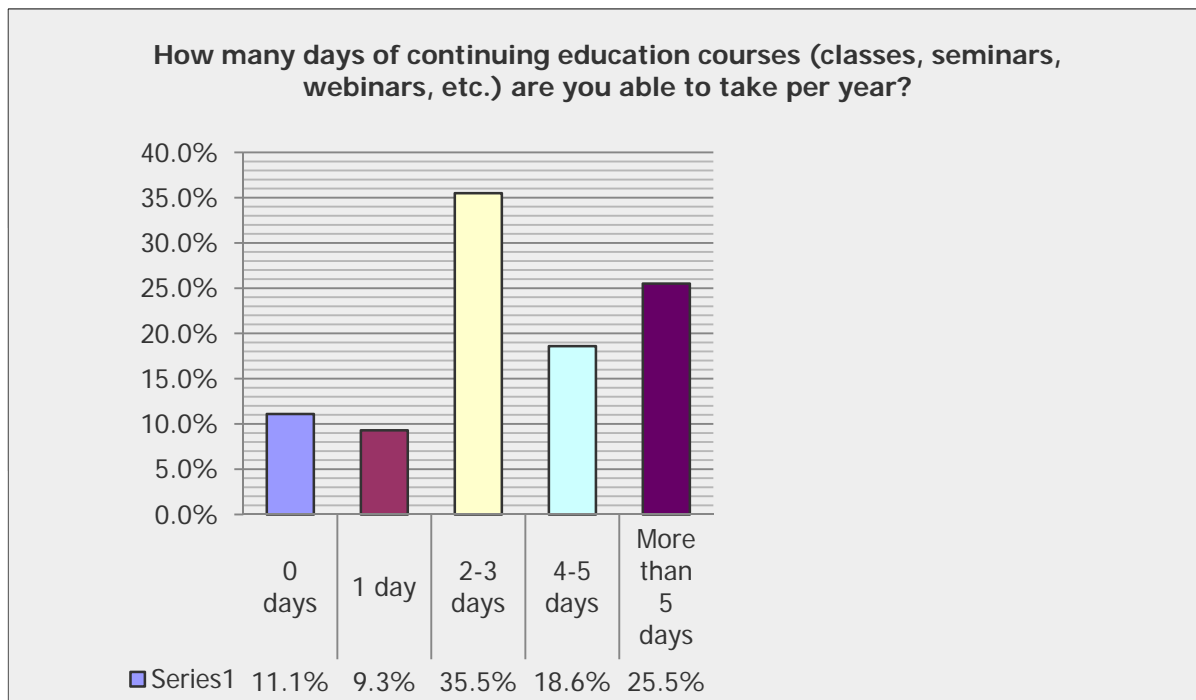


- Always
- Most of the Time
- Sometimes
- Never

Society of Broadcast Engineers Training and Development Survey

How many days of continuing education courses (classes, seminars, webinars, etc.) are you able to take per year?

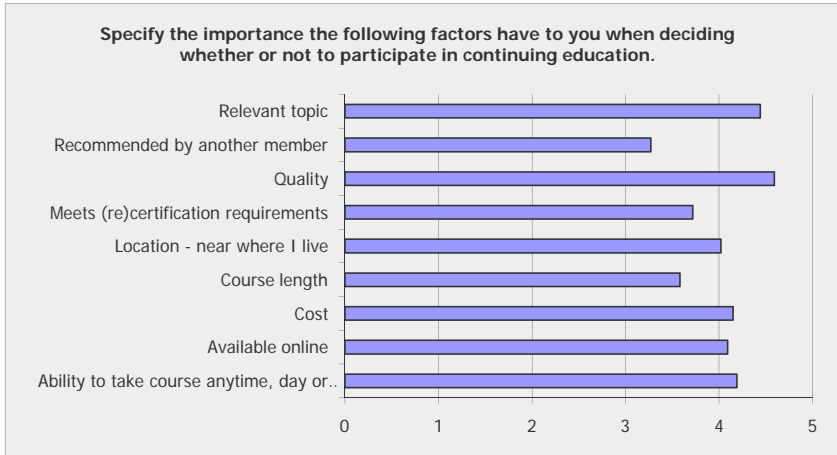
Answer Options	Response Percent	Response Count
0 days	11.1%	102
1 day	9.3%	85
2-3 days	35.5%	325
4-5 days	18.6%	170
More than 5 days	25.5%	233
<i>answered question</i>		915
<i>skipped question</i>		87



Society of Broadcast Engineers Training and Development Survey

Specify the importance the following factors have to you when deciding whether or not to participate in continuing education.

Answer Options	Very Important	Important	Somewhat Important	Not Important	Not a Factor	Rating Average	Response Count
Ability to take course anytime, day or night	405	333	128	29	16	4.19	911
Available online	372	328	152	39	19	4.09	910
Cost	382	319	184	16	10	4.15	911
Course length	115	396	317	63	18	3.58	909
Location - near where I live	324	355	168	32	24	4.02	903
Meets (re)certification requirements	246	323	215	82	41	3.72	907
Quality	565	320	15	3	4	4.59	907
Recommended by another member	81	309	342	118	56	3.27	906
Relevant topic	476	373	46	4	7	4.44	906
<i>answered question</i>							915
<i>skipped question</i>							87



Society of Broadcast Engineers Training and Development Survey

Indicate all of the following subjects that would be of interest to you:

Answer Options	Response Percent	Response Count
8-VSB	41.2%	377
AM Antenna Modeling	28.5%	261
Broadband Technologies	56.5%	517
Broadcast Engineering Fundamentals	48.4%	443
Broadcast Engineering Management	50.7%	464
Data Broadcasting Technologies and Applications	49.2%	450
Digital Radio	40.9%	374
Digital Television	59.1%	541
EAS	44.2%	404
ENG Safety	24.2%	221
FCC Legal Issues	44.5%	407
FM Antenna Basics	29.4%	269
HD Radio	36.4%	333
IBOC Performance	29.3%	268
Leadership / Supervision	36.7%	336
Mobile Technology	35.7%	327
New Media Technologies	45.9%	420
New Receiver and Transmitter Technologies	46.1%	422
PSIP	33.2%	304
Remote Broadcasting	32.5%	297
RF Safety	42.1%	385
Satellite Truck Operations	23.6%	216
Spectrum Management	25.4%	232
Television Standards Work	30.1%	275
Television Transmission Systems and Maintenance	40.1%	367
Tower Failure Prevention	37.5%	343
Other (please specify)	10.2%	93
<i>answered question</i>		915
<i>skipped question</i>		87

Number	Other (please specify)
1	IT/networking
2	IP Technologies
3	Balancing family life with engineering demands.
4	Stress reduction
4	Live Wire technology
5	Studio Audio, 5.1 audio, lip sync, audio embedding technologies, audio processing in a digital environment
6	Digital Audio
7	Updated on line study materials for certification. Will not buy 20 year old books.
8	Conflict Resolution
9	Internet Technology
10	Ethernet and IT
11	HD Television, SDI video, production data exchange, advanced networking ... new new new
12	None of above. I'm retired.
12	satellite truck operator certification
13	retirement planning
14	CAP
15	centralcasting/distribution alternatives
16	TCP/IP - MPEG - CISCO
17	OSHA in regard to broadcast engineering management
17	Computer Networking Intergration Basics, Computer Networking Administration (both user admin/sys admin), IPTV intergration to a Live to Air facility, Computer Migration / Intergration
18	Management.
19	OSHA related topics, remote control and monitoring
20	computers, networking, web applications,
21	Audio processing, Audio over IP, VoIP telephony for broadcasters.
22	IT technologies
23	Measuring and testing equipments
24	PPM

- 25 Former Military
- 26 Multicast over IP and NGIP
- 27 IP Audio, various platforms
- 28 Digital audio
- 29 Is the public really going to adopt IBOC and buy the radios or are we fooling ourselves and should we stop putting good money after bad?
- 30 Transcoding & Data streaming/Encoding; IT and Broadcast Engineering; Video Data storage; Network resource structuring with Automation systems and DAM (Digital Asset Management) workflow.
- 31 Transmitter Site Technical, Legal, Maintenance Issues
IP and Broadcasting
IP at the studio, transmitter, and
- 32 Monitoring
- 33 CATV Distribution and related technology
- 34 it
- 35 IT and LAN in Broadcast Facilities
- 36 communication skills for communicating with non technical staff members, and management
- 37 Computer & Network
- 38 Electronics maintenance and repair
- 39 Digital microwave for News; new technology for News field acquisition/editing/transmission
- 40 DRM
- 41 Getting my days down to something less than 12 - sometimes 18 hours.
- 42 Gen. Electronics Engineering
- 43 Fiber Optic Fundamentals and Troubleshooting and test and maintaining fiber optic systems.
- 44 Remote Television Planning and Operations
- 45 industry canada Regulations
- specific system design: what doesn't work, drawings, integration, operation limitations, not just listing projects/equipment/vendors; display issues ie: compatibility, format, value, resolution, aspect ratio, system design; management for engineers (like formerly in BE magazine) should be a regular column in the news letter; change certification to promote more local intergation project presentations; more national regional training; less costly training
- 46
- 47 codecs
- 48 Project Management, Emergency Management
- 49 Digital Audio
- 50 Computers and networking
- 51 Electrical supply and safety.
- 52 Computer networks
- 53 Surround Sound Technology
- 54 Computer networking, and anything related to IT infrastructure would be very helpful.
- 55 Monitor Repair, LAN/WAN, computer software/hardware repair
- how to use and when to use safety equipment
- What Chemicals are use and safety
- 56 Servicing Equipment what steps one should do to work on TX/ RX to avoid high voltage/ low volt injuries.
- 57 software; C,C++
- 58 Information Technology
- Digital Audio and Audio over IP,
- 59 Computer Networking for Broadcasters
- 60 Emergency prep / Disaster Recovery
- 61 computer networking, computer network server configuration
- 62 EMC and RFI
- 63 IT in the brodcast world
- 64 IT Related Topics as well
- 65 video deck maintenance
- 66 Voice, audio, and video over IP.
grounding and shielding fundamentals; computer networking fundamantals and advanced
- 67 networking
- 68 more TV overall.
HDTV transport stream integration &
- 69 Facilities design
- 70 Video Compresson
- 71 Broadcasting IT related technologies; IPTV
- 72 IPTV
- 73 Station Grounding
- 74 TV over IP

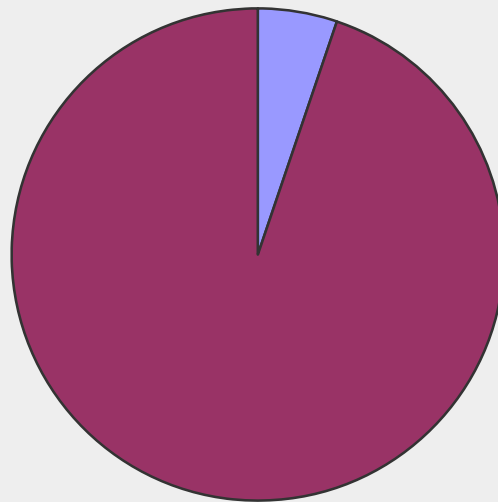
- Please note I'm retired. Answers to questions are either preferences for "if" I worked, or as they applied past tense. Good survey. Thanks.
- 75** applied past tense. Good survey. Thanks.
 - 76** Studio Equipment Maintenance
 - all audio related topics
 - 77** wireless microphone issues
 - 78** advanced computer skills
 - 79** I am retired and out of the business
Common software apps, like Adobe Audition and how to make them play with automation systems like AudioVault,.
 - 80** like AudioVault,.
 - 81** IT related to broadcast and broadcast media
 - 82** HF propagation for International broadcasting.
 - 83** Computer network basics. How to setup, maintain and troubleshoot in house networks.
 - 84** IPTV
 - 85** Client expectation management
 - 86** must have IT courses for advanced networking metadata structures etc.
 - 87** SBE should offer IT training.
 - 88** microwave fundamentals course
 - 89** Mid-level and High level IT/network engineering
 - 90** I checked off items that I would like my staff to be able to participate in, not necessarily topics I need.
 - 91** Contract Engineering: How to establish and maintain a solo consulting business.
 - 92** Alternative energy and conservation

Society of Broadcast Engineers Training and Development Survey

Have you ever taken an online course from SBE University?

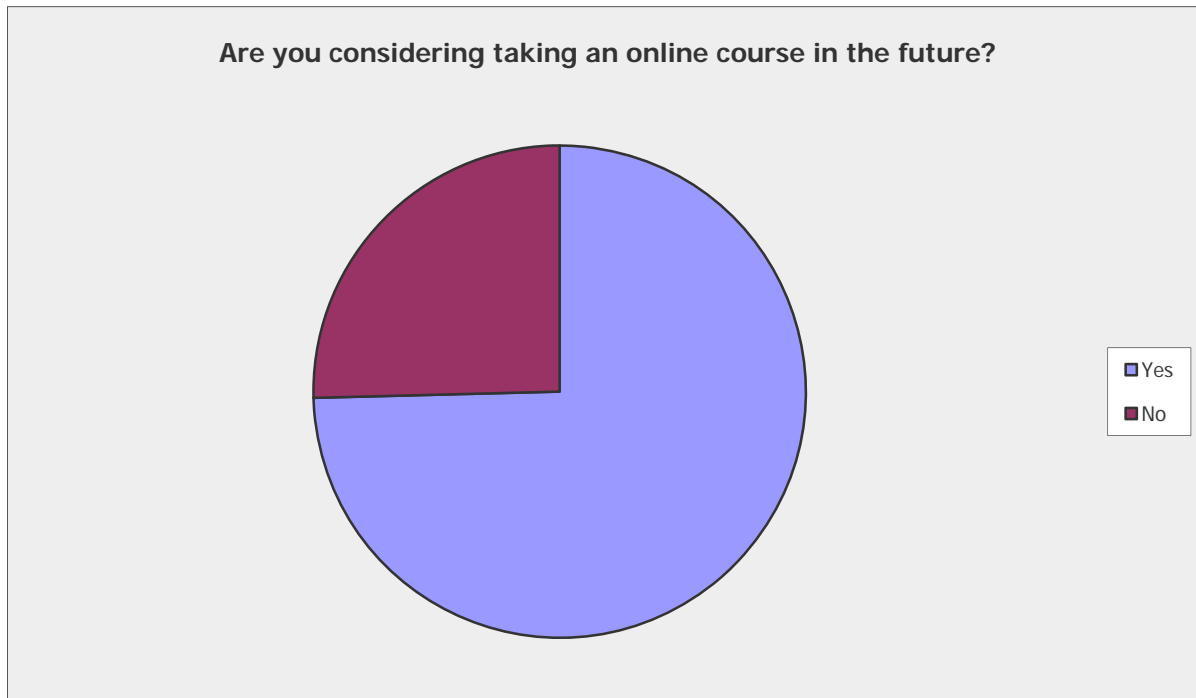
Answer Options	Response Percent	Response Count
Yes	5.2%	47
No	94.8%	865
<i>answered question</i>		912
<i>skipped question</i>		90

Have you ever taken an online course from SBE University?



Society of Broadcast Engineers Training and Development Survey

Are you considering taking an online course in the future?		
Answer Options	Response Percent	Response Count
Yes	74.6%	680
No	25.4%	232
<i>answered question</i>		912
<i>skipped question</i>		90

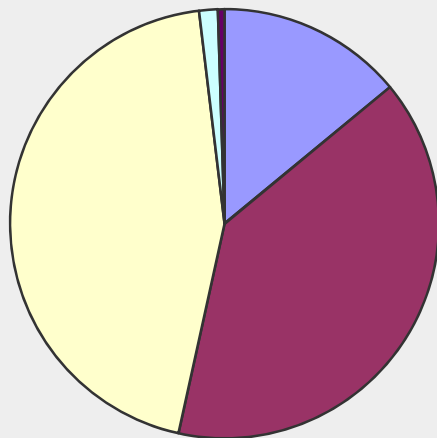


Society of Broadcast Engineers Training and Development Survey

Please indicate how much you agree with the following statement: **SBE University online courses are beneficial and valuable to me as a way to learn.**

Answer Options	Response Percent	Response Count
Strongly Agree	14.0%	128
Agree	39.4%	359
Neither Agree nor Disagree	44.6%	407
Disagree	1.4%	13
Strongly Disagree	0.5%	5
<i>answered question</i>		912
<i>skipped question</i>		90

Please indicate how much you agree with the following statement:
SBE University online courses are beneficial and valuable to me as a way to learn.



- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

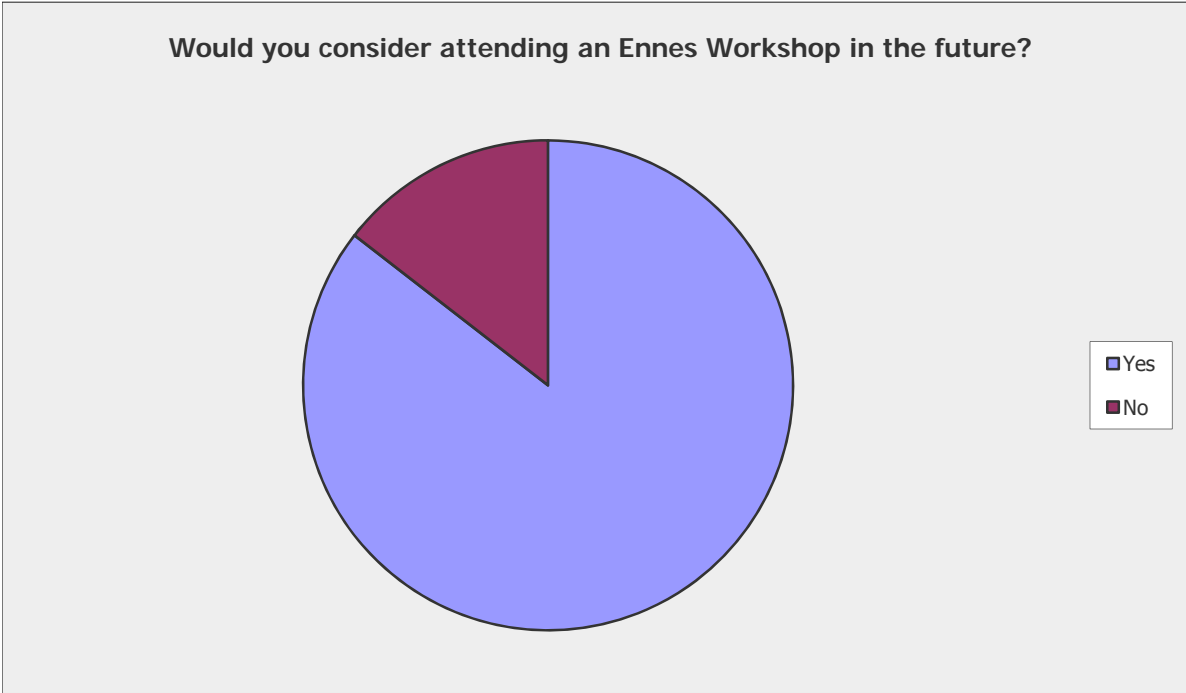
Society of Broadcast Engineers Training and Development Survey

Have you attended an Ennes Workshop in the past?		
Answer Options	Response Percent	Response Count
Yes	33.0%	301
No	67.0%	611
<i>answered question</i>		912
<i>skipped question</i>		90



Society of Broadcast Engineers Training and Development Survey

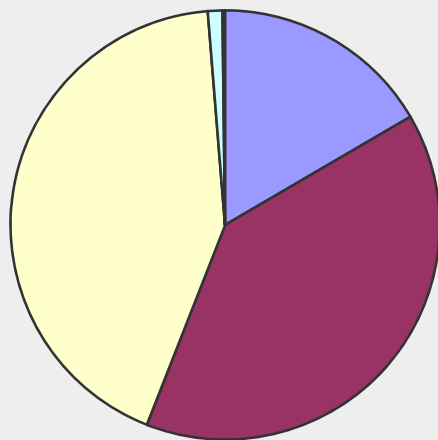
Would you consider attending an Ennes Workshop in the future?		
Answer Options	Response Percent	Response Count
Yes	85.5%	780
No	14.5%	132
<i>answered question</i>		912
<i>skipped question</i>		90



Society of Broadcast Engineers Training and Development Survey

Please indicate how much you agree with the following statement: Ennes Workshops are beneficial and valuable to me as a way to learn.		Ennes
Answer Options	Response Percent	Response Count
Strongly Agree	16.6%	151
Agree	39.4%	359
Neither Agree nor Disagree	42.8%	390
Disagree	1.1%	10
Strongly Disagree	0.2%	2
<i>answered question</i>		912
<i>skipped question</i>		90

Please indicate how much you agree with the following statement:
Ennes Workshops are beneficial and valuable to me as a way to learn.



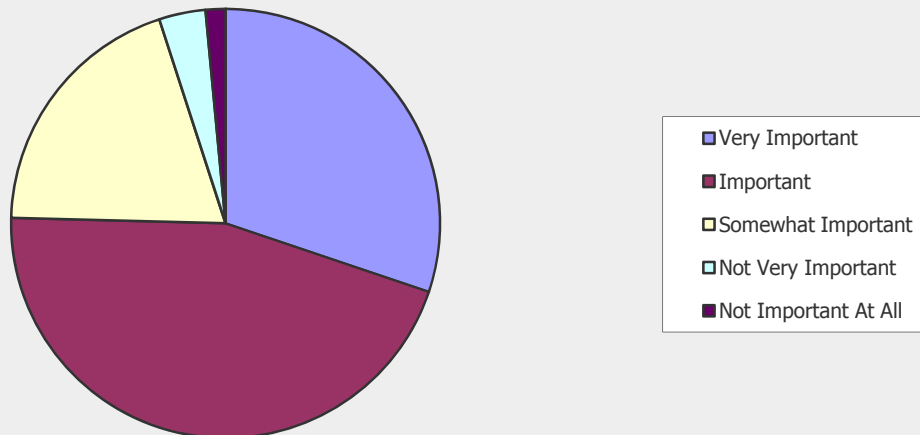
- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Society of Broadcast Engineers Training and Development Survey

Please rate how important you feel it is for SBE to offer a leadership / management development course designed for broadcast engineers.

Answer Options	Response Percent	Response Count
Very Important	30.2%	269
Important	45.3%	404
Somewhat Important	19.6%	175
Not Very Important	3.5%	31
Not Important At All	1.5%	13
<i>answered question</i>		892
<i>skipped question</i>		110

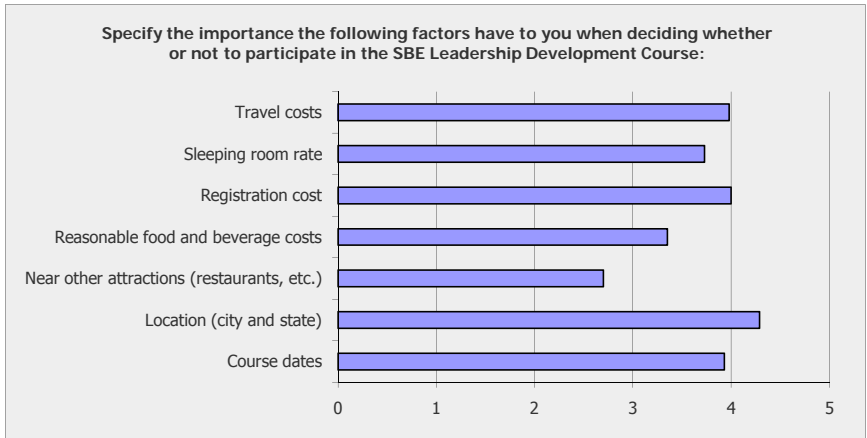
Please rate how important you feel it is for SBE to offer a leadership / management development course designed for broadcast engineers.



Society of Broadcast Engineers Training and Development Survey

Specify the importance the following factors have to you when deciding whether or not to participate in the SBE Leadership Development Course:

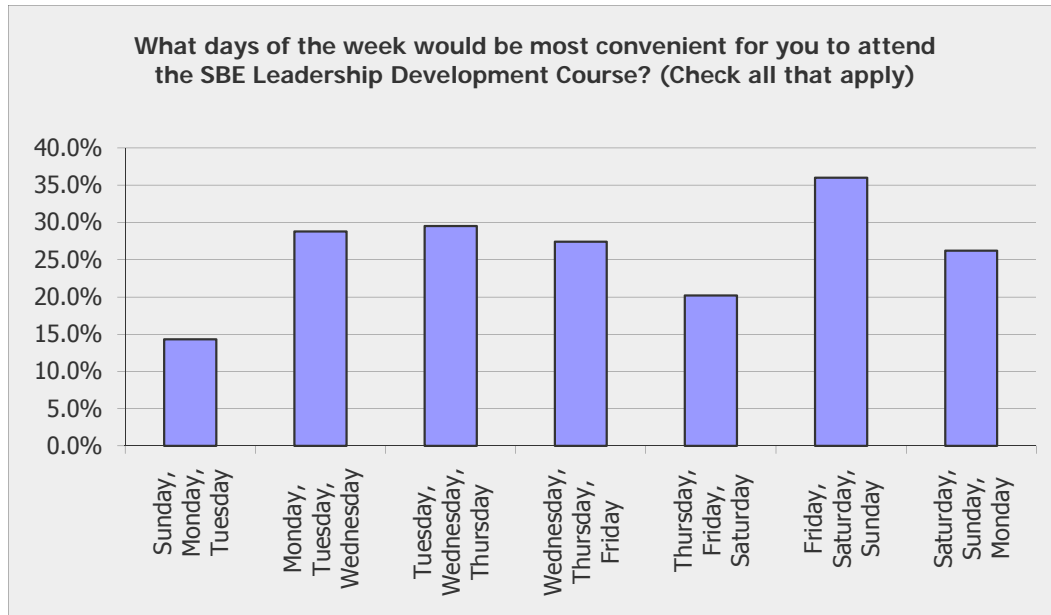
Answer Options	Very Important	Important	Somewhat Important	Not Very Important	Not Important At All	Rating Average	Response Count
Course dates	256	409	160	37	27	3.93	889
Location (city and state)	436	338	78	14	25	4.29	891
Near other attractions (restaurants, etc.)	37	142	330	265	107	2.70	881
Reasonable food and beverage costs	98	304	328	118	37	3.35	885
Registration cost	289	379	178	19	24	4.00	889
Sleeping room rate	183	387	246	37	33	3.73	886
Travel costs	282	372	180	18	29	3.98	881
<i>answered question</i>							892
<i>skipped question</i>							110



Society of Broadcast Engineers Training and Development Survey

What days of the week would be most convenient for you to attend the SBE Leadership Development Course? (Check all that apply)

Answer Options	Response Percent	Response Count
Sunday, Monday, Tuesday	14.3%	128
Monday, Tuesday, Wednesday	28.8%	257
Tuesday, Wednesday, Thursday	29.5%	263
Wednesday, Thursday, Friday	27.4%	244
Thursday, Friday, Saturday	20.2%	180
Friday, Saturday, Sunday	36.0%	321
Saturday, Sunday, Monday	26.2%	234
Comments		49
<i>answered question</i>		892
<i>skipped question</i>		110

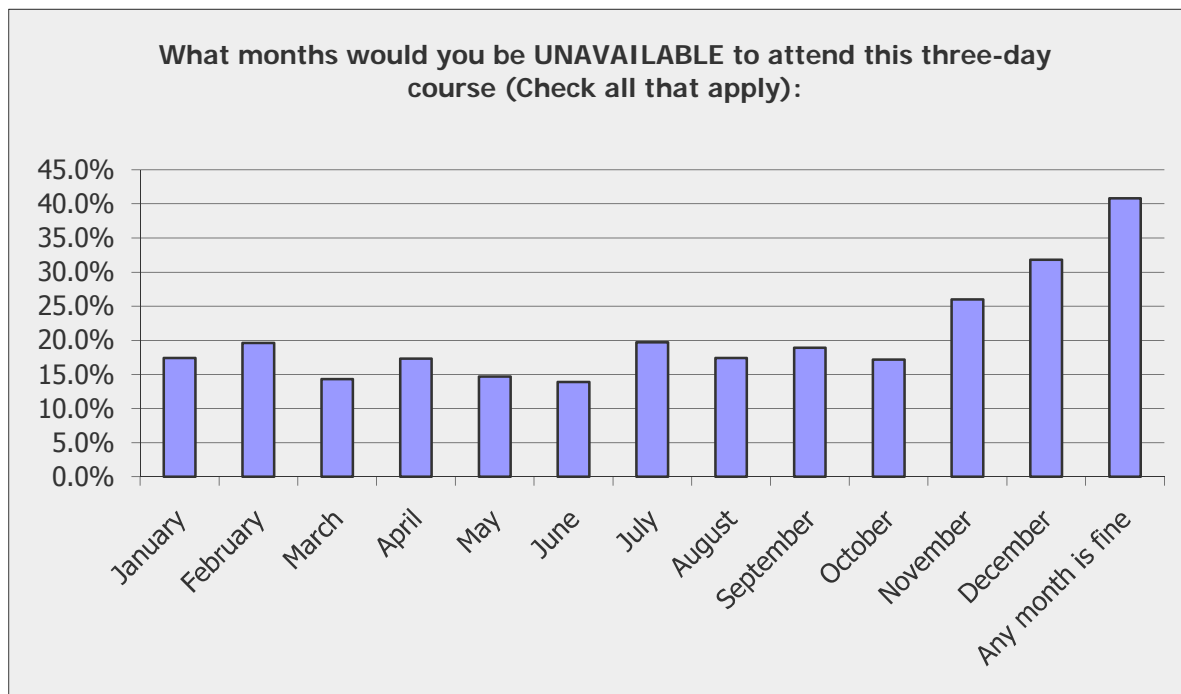


Number	Comments
1	As a retired military, I have been trained in many leadership topics. I have served as a Chief Engineer and assistant Chief Engineer.
2	Work week! If I'm working over the weekend it's impossible to get time off during the week before or after, makes for a very grumpy engineer!
3	Time of year is more important to me. The academic year is late August to mid-May. Summers work best.
4	none of the above, I have to be in the office monday, wednesday, and Friday for a live uplink.
5	Being able to take the courses on regularly scheduled days off is a major plus.
6	No preference
7	Personally I am not interested in management training
8	no weekends
9	Keep it to two week-end days 12 hr per day is less exp
10	Got to "play" GM during the week.
11	It's just impossible to travel to take courses.
12	By staying over the weekend, travel is cheaper
13	depends on what I am doing really
14	Does not matter
15	depends on what is happening else where
16	You'd have to pay me to attend.
17	Just not possible in person except during vacation.
18	would not attend
19	The least amount of time "off the job" possible.
20	Depends
21	Weekends are off (hopefully), Mondays & Fridays are typically challenging
22	consider spreading it out
23	Any day is good when it's important
24	Depends on where it is and cost to get there, hotel + living expenses, etc.
25	not interested in a leadership course
26	Not interested in this offering regardless of day
27	No interest in this course at this point in my career.
28	Do the three days include a travel day each way?
29	Any days
30	very dependent upon job situation
31	Any days fine
32	doesn't matter
33	Any combination is fine
34	I am retired and would probably not attend any
35	Certainly non working days would make it easier to attend.
36	I am a leader. This question is irrelevant. I could teach!
37	don't know
38	This varies with my workload and schedule
39	I'm not interested in a career in Management
40	Who wants to do training on the weekends!
41	Most engineers do not supervise anyone, nor do they have any authority so I don not believe this is an important topic for the everyday engineer.
42	Probably better to have a couple of weekend days and one web day
43	Where is the: Does not apply
44	Employer support CE - prefer during work week
45	it varies based on long term scheudled projects
46	Retired, Prefer on-line courses

Society of Broadcast Engineers Training and Development Survey

What months would you be UNAVAILABLE to attend this three-day course (Check all that apply):

Answer Options	Response Percent	Response Count
January	17.4%	155
February	19.6%	175
March	14.3%	128
April	17.3%	154
May	14.7%	131
June	13.9%	124
July	19.7%	176
August	17.4%	155
September	18.9%	169
October	17.2%	153
November	26.0%	232
December	31.8%	284
Any month is fine	40.8%	364
<i>answered question</i>		892
<i>skipped question</i>		110

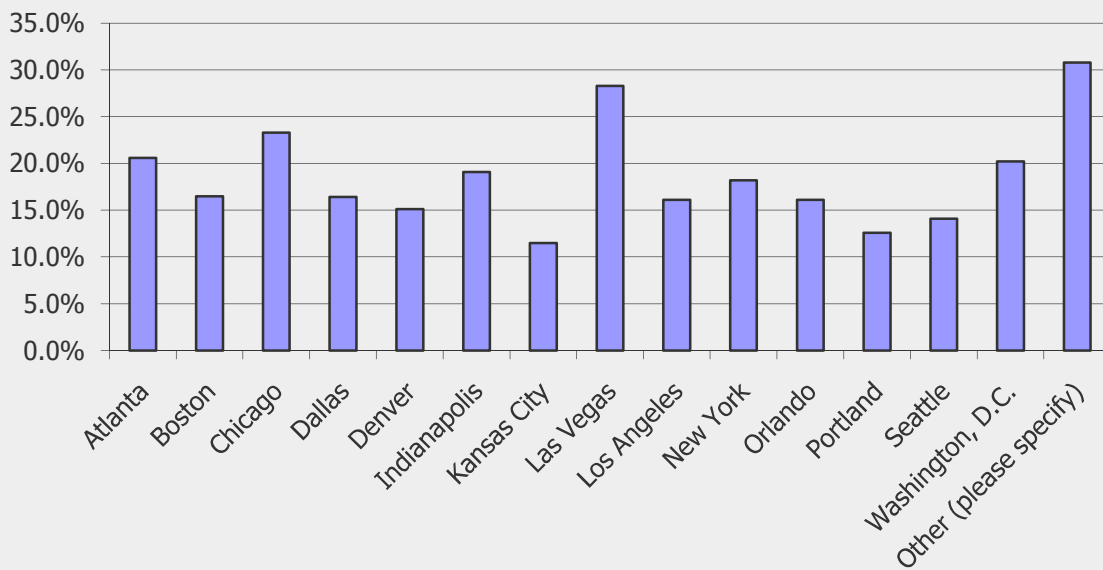


Society of Broadcast Engineers Training and Development Survey

Please select all the destinations you would consider traveling to for the Leadership Development Course:

Answer Options	Response Percent	Response Count	
Atlanta	20.6%	184	3
Boston	16.5%	147	
Chicago	23.3%	208	2
Dallas	16.4%	146	
Denver	15.1%	135	
Indianapolis	19.1%	170	5
Kansas City	11.5%	103	
Las Vegas	28.3%	252	1
Los Angeles	16.1%	144	
New York	18.2%	162	
Orlando	16.1%	144	
Portland	12.6%	112	
Seattle	14.1%	126	
Washington, D.C.	20.2%	180	4
Other (please specify)	30.8%	275	
answered question		892	
skipped question		110	

Please select all the destinations you would consider traveling to for the Leadership Development Course:



Other Cities Noted

	Albany NY				
2	Albuquerque				
	Anchorage, AK				
	Any location within reasonable driving distance from New York City				
	Any place within 4 hours of Norfolk, VA				
	Anywhere in North Carolina				
	Anywhere in South America, specially in Brazil, if possible.				
	asutin, san antonio, houston				
6	Austin				
	Baltimore				
	Baton Rouge, La.				
	Binghamton, NY				
2	Boise				
	Buffalo, Syracuse, Albany, NY				
4	Calgary Alberta Canada (1 put Western Canada)				
2	Charleston SC				
9	Charlotte				
	Cincinnati				
9	Cleveland				
	Colorado Springs, CO				
5	Columbus, Cincinatti				
6	Detroit				
	doesn't matter				
	el paso, tx				
	Eugene, OR				
	Grand Rapids Michigan				
	Green Bay, WI				
4	Hartford, CT				
2	Hawaii				
2	Hong Kong				
11	Houston, Austin, San Antonio				
	How about east coast, but not a big city=cheap hotel				
	I am in pre-retirement mode, now working 15 hours per week and really am not interest in traveling to take any courses. Online availability is my preference.				
	I have a college major in this. I need engineering topics.				
	I just put down any answer to be able to move along.				

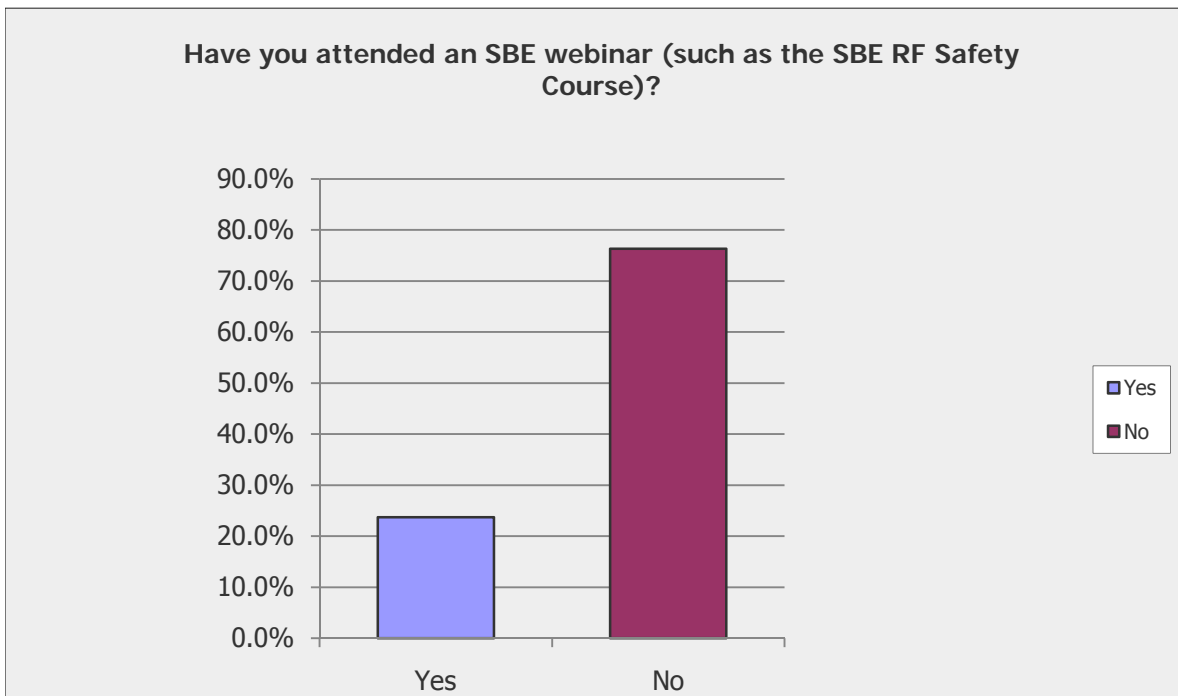
	I live in Nigeria. Is there any possibility of holding a course outside of the USA?				
	I wouldn't cross the street to attend.				
	I'm not interested in a career in Management				
	It is important to me that the courses are close to home.				
	It would be beneficial to move the course location around to ease travel				
	Jacksonville, Tampa				
	Las Vegas if it was around dthe PBS Engineering Mtg/NAB				
3	less than 50 miles away (2 put local)				
3	Louisville Cincinnati				
3	Madison or Minneapolis				
	Medford OR				
	Memphis, TN				
9	Miami or Fort Lauderdale				
	Michigan, Cleveland, Cincinnati, Indianapolis				
	Milwaukee WI				
10	minneapolis				
	Mobile Alabama				
10	Nashville				
	NJ Near Newark Airport. Covers NY at lower cost				
7	none (retired or not interested for 2)				
2	Northern California				
	note: I have already completed this training				
	Oakland				
	Ohio location - convenient to station				
2	Oklahoma City				
2	Omaha				
	Orange County, California				
	outside USA				
	Pakistan				
18	Philadelphia				
14	Phoenix				
11	Pittsburg				
	Columbus, Cleveland, and Cincinnati Ohio				
	Prefer mid-west to minimize travel cost.				
5	Raleigh				
	Reno, NV most of all Sacramento Ca.				
	retired				
	Richmond, VA or Norfolk, VA				
	ROCHESTER, NY				
7	Sacramento				
3	Salt Lake City				
3	San Antonio, TX				

	San Bernardino				
4	San Diego				
28	San Francisco/Sacramento				
	Smaller cities are better!				
	Somewhere in Asia				
	south east region of US				
2	Spokane				
13	St. Louis				
5	Syracuse				
	Greenville, SC; Pittsburgh, PA				
8	Tampa				
	Tidewater VA, Raleigh, NC				
4	TULSA				
	Tuscon				
	unable to travel due to lack of engineering relief				
	Unemployed and can not afford to travel				
	Upstate New York				
3	Virginia Beach				
	West Coast cities fine				
	Where is the: Does not Apply?				
	within a days drive				
	WV				

Society of Broadcast Engineers Training and Development Survey

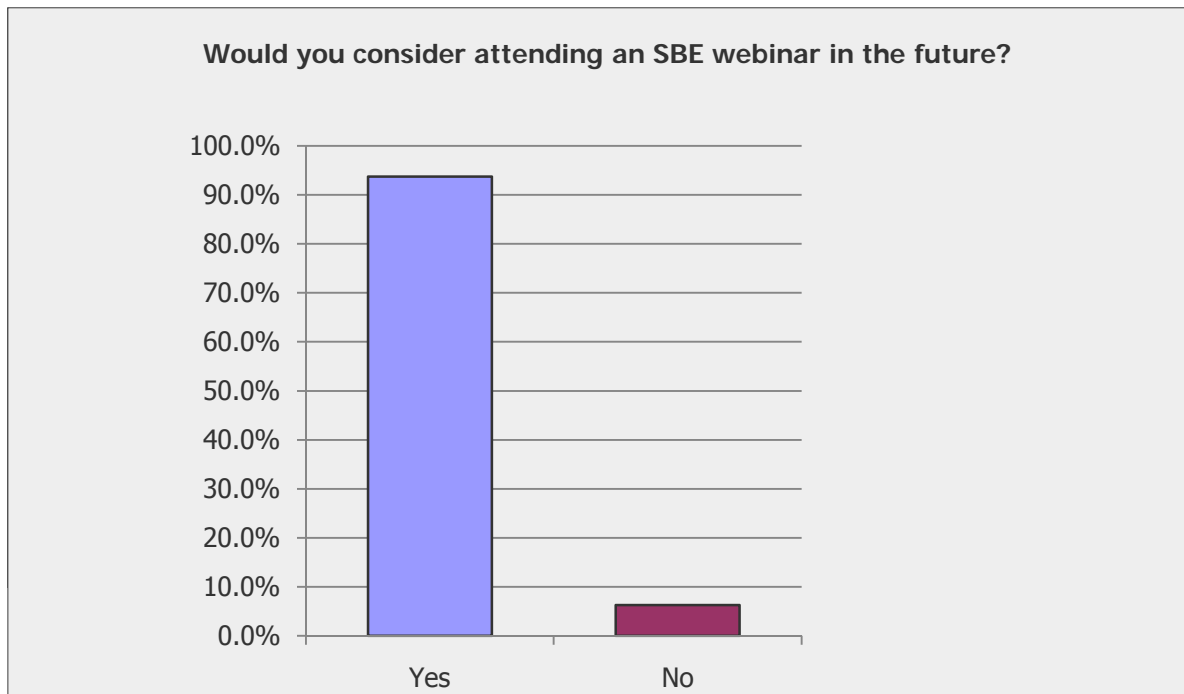
Have you attended an SBE webinar (such as the SBE RF Safety Course)?

Answer Options	Response Percent	Response Count
Yes	23.7%	211
No	76.3%	678
<i>answered question</i>		889
<i>skipped question</i>		113



Society of Broadcast Engineers Training and Development Survey

Would you consider attending an SBE webinar in the future?		
Answer Options	Response Percent	Response Count
Yes	93.7%	833
No	6.3%	56
<i>answered question</i>		889
<i>skipped question</i>		113

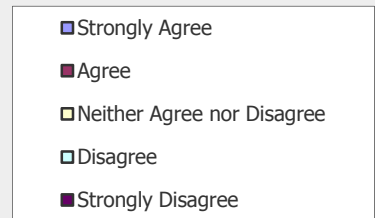
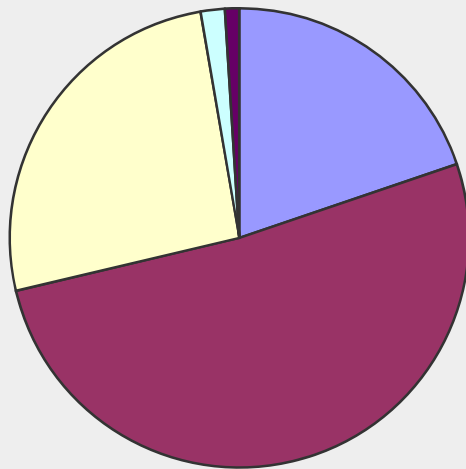


Society of Broadcast Engineers Training and Development Survey

Please indicate how much you agree with the following statement: Webinars are beneficial and valuable to me as a way to learn.

Answer Options	Response Percent	Response Count
Strongly Agree	19.8%	176
Agree	51.5%	458
Neither Agree nor Disagree	26.0%	231
Disagree	1.7%	15
Strongly Disagree	1.0%	9
<i>answered question</i>		889
<i>skipped question</i>		113

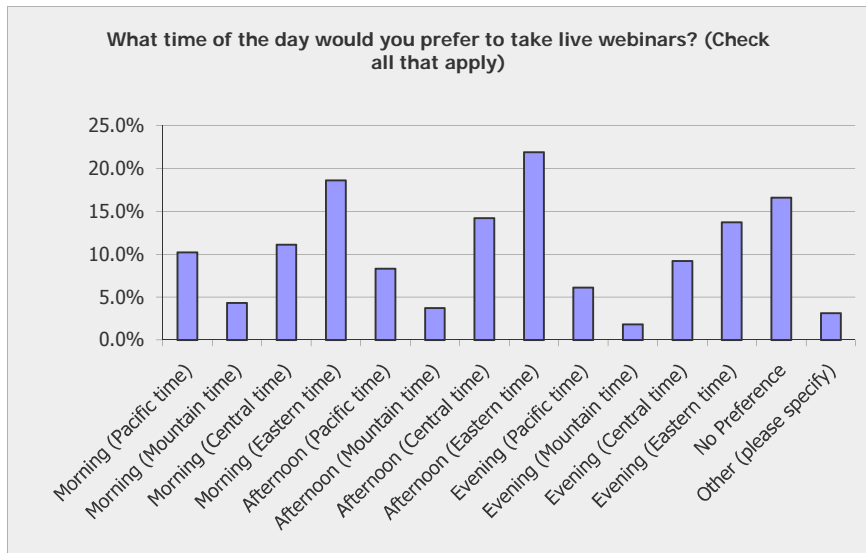
Please indicate how much you agree with the following statement:
Webinars are beneficial and valuable to me as a way to learn.



Society of Broadcast Engineers Training and Development Survey

What time of the day would you prefer to take live webinars? (Check all that apply)

Answer Options	Response Percent	Response Count
Morning (Pacific time)	10.2%	91
Morning (Mountain time)	4.3%	38
Morning (Central time)	11.1%	99
Morning (Eastern time)	18.6%	165
Afternoon (Pacific time)	8.3%	74
Afternoon (Mountain time)	3.7%	33
Afternoon (Central time)	14.2%	126
Afternoon (Eastern time)	21.9%	195
Evening (Pacific time)	6.1%	54
Evening (Mountain time)	1.8%	16
Evening (Central time)	9.2%	82
Evening (Eastern time)	13.7%	122
No Preference	16.6%	148
Other (please specify)	3.1%	28
answered question		889
skipped question		113

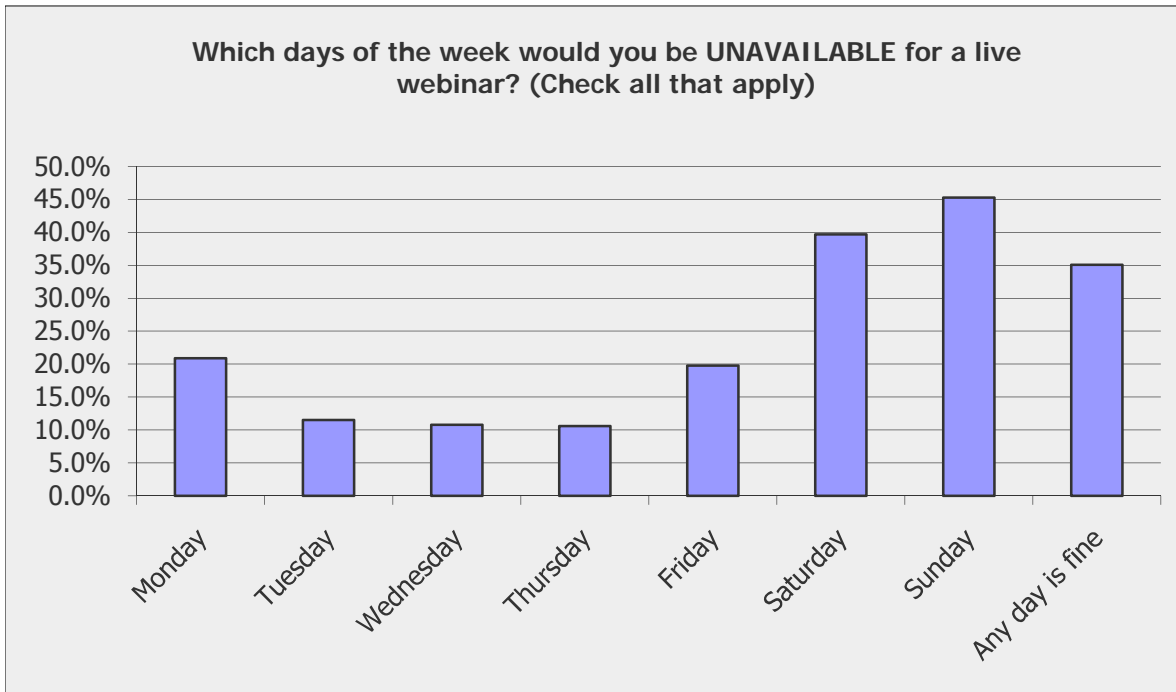


Number	Other (please specify)
1	on demand spooling. we work too many hours to fix a specific time in advance
2	Unemployed and internet will be discontinued to use the funds to buy food
3	n/a
4	morning Hawaii Time
5	weekends
6	Evening (Atlantic time)
7	Make them on Saturday or Sunday only
8	Would be better to have both live and pre-recorded versions (latter avail. anytime), like courses.
9	depends on what else is happeming
10	Can't you do playback on demand, when I'm clear to hear it?
11	I'm retired
12	would not attend
13	a
14	Depends
15	evenings MTWTh, or daytime Sat
16	mid-day Pacific time (could cross through lunch)
17	On Demand - can't do real-time seminars. NO Internet connection.
18	Late afternoonb (3pm forward)
19	Night after 9 O'clock
20	After 0:00 GMT (21:00 Brazilian Standard Time)
21	Having a recorded stream available after the event would be fantastic, too!
22	I am retired and would probably not attend
23	Irrelevant, I used to be a broadcast engineer. Just not interested at this time. Make it an option.
24	Alaska time is one hour earlier than Pacific time.
25	My company does not have interactive audio/video.
26	Evening Monday - Sunday
27	Weekends
28	Saturdays

Society of Broadcast Engineers Training and Development Survey

Which days of the week would you be UNAVAILABLE for a live webinar?
(Check all that apply)

Answer Options	Response Percent	Response Count
Monday	20.9%	186
Tuesday	11.5%	102
Wednesday	10.8%	96
Thursday	10.6%	94
Friday	19.8%	176
Saturday	39.7%	353
Sunday	45.3%	403
Any day is fine	35.1%	312
<i>answered question</i>		889
<i>skipped question</i>		113



Society of Broadcast Engineers Training and Development Survey

Are there specific topics or courses you think SBE should consider offering?

	Response Count
	848
<i>answers</i>	848
<i>skipped</i>	154

#	Response Text
	Establishing and operating a one person broadcast engineering consulting firm.
	Modern HD Camera Technology and maintenance (studio and field). Studio Lighting, are fluorescents the best now? Designing legal wireless mic systems in today's spectrum. Inexpensive software to make wiring drawings and other station documentation.
	1)Wi-Fi, Wi-Max, Wireless Internet broadcast systems and fundamentals. 2)Audio / Video over IP. Integrating these systems into existing and new broadcast facilities.
	1. Basic Electronics 2. Computer maint course (similar to CBNT for networking technology) 3. Computer graphics standards and interfaces w/ broadcast systems
	1. Digital Television fundamentals. 2. IT role in television broadcast.
	1. Wireless mics under rebanding 2. Transitioning facilities from analog sd to current technology (PEG channel)
	8 VSB troubleshooting, signal analysis, Video over IP, MPEG Transport integrity
	A basics SBE entry level course with material for those exiting college or higher study
	A course covering satellite up/downlinking.
	a) Basic courses for entry-level Engineers, to help them get established. b) Courses specifically designed to help SBE Certified Engineers upgrade their credentials to higher levels.
	AC Power Systems as an Online course
	Actually the topics you should a couple of slides back all seemed good for me.
	adobe audition, pro tools, radio automation processes
	Advance Networking (WAN, Wireless WAN), Mobile ATSC, Mobile PSIP
	advanced FM/TV antenna and transmission system
	Advanced networking (IPTV).
	Advanced test equipment operation (network analyzers, etc.) --Radio Automation and Systems Integration
	All Digital plant fundamentals. Switchers, audio processing, and timing.
	AM & FM transmitter basics
	AM Antenna tuning
	AM Directional
	AM directional "broadbanding"
	AM Directional antenna and hd - phase rotation and broadcasting in digital.
	AM Directional Antenna issues with local re radiation, especially if you have a 50KW at 1520 in a metro area
3	AM Directional Antennas
	AM Directional systems, proofs of performance procedures and measurement methods.
	AM non-directional antenna tuning units: How to set up impedance bridge, synthesizer, etc for matching transmitter to tower. How to determine network components for various power levels. Measuring base impedances.
	Analog to Digital transition methodology for dealing with archived material. Transition from traditional production methodology to desktop computer operation.
	Analyzing an MPEG stream
	Any broadcasting courses are fine...
	Any relevant topic on technology

	Any thing that would help someone with a strong electronics background and little broadcast experience.
	any topic that applies to the field
	anything EAS related
	Anything in the area of New Media Technology and basic engineering courses geared to non-engineers for small production companies, worship production facilities or secondary schools.
	Anything to do with FCC Compliance (EAS, towers & sites, etc)
	Apple FCP Cerifications, AVID certifications, PMP certifications
	Arc-Flash hazards
	As I mentioned, IT for Broadcasters (Computer Networking, IP and all that stuff) and Digital Audio including Audio over IP (As in Axia Audio)
	as SBE mension before
	ATSC Standards, RF and antenna for DTV
	Audio engineering for radi and TV
	Audio for Television
	Audio for TV.
	audio over IP as it relates to studio buildout
	Audio over IP, digital console, editing work stations□ Internet Broadcasting (streaming)
	audio processing basics
	Audio processing for HD radio.
	audio processing, IT (server/client, TCP/IP fundamentals)
	Audio streaming
	Audio systems, Antenna systems
	Audio, video, and voice over IP.
	Autocad for Electronics
	bandwidth management and antenna design
	Basic Broadcast Fundamentals for those of us that come from an IT background
	Basic Circuit Analysis
	Basic courses on networking and troubleshooting networks would be very helpful. Security of networks. Learning to configure routers and securing them from hackers.
	Basic courses to help new commers
	Basic Engineering
	Basic Fundamentals for non-technical TV Operators, beyond Operator Certification.
	Basic Hygiene for engineers
	Basic RF theory, RF systems troubleshooting, How to manage the manager
	Basic stuff for young engineers. RF transmitter repair and RF systems. The young engineers have the computer skills, but not the RF skills.
	Boolean logic, Computer networking
	Broadband Applications for Broadcast
	Broadband Essentials
	Broadcast audio/IP
	Broadcast automation, tape-less infrastructure, audio levels from ingest to home
	Broadcast Engineer testing. Safety equip and how to use it. Equipment Test Refresher Course, How to use the new Equipment in real world.
	Broadcast engineering fundamentals including DA maintenance and tuning.
	broadcast systems maint.,microwave fundamentals.am,fm tv broadcast antenna maint.more rf safety expanding MR.Richard Strickland RF Safety Course in depth.
	broadcating ,FM AND AM RADIO
	Brush up classes/courses for Electronics Fundamentals and/or Broadcast Television Fundamentals

	Building a master control facility, Using broadcast facility CAD programs, Broadcast Electronics, Systems troubleshooting, Camera alignment basics, RTS/Intercom/IFB issues and technology, TV and Audio Routers, SNMP, Waveform Monitors in use by engineers today, what they like, Veteran engineers mentoring newer engineers in testing and measurement, troubleshooting seminars, Broadcast Engineer Handbook discussion forums/webinars online (Jerry Whitaker books)
	Business Fundamentals,
	care, feeding, Maintenance of ATSC transmission
	Career counseling/assessment for members over 40.
	CATV Systems
	Certification Courses (e.g. CSRE etc)
	Certification test
	certifications on-line and at low cost
	Certified Broadcast Network technician or Certified Audio Engineer
	Changes in EAS/CAP. IP alerting
	College credit toward a degree.
	Common mistakes in PSIP data
	component level troubleshooting workshops.
2	Computer networking
	Computer networking as it relates to a radio broadcast facility.
	computer networking including router configuration, conmputer server configuration, web server configuration, ip audio basics, basics of using test equipment (you'd be surprised how many people have no clue how to set up and use a spectrum analyzer)
	Computer networking, IT related to production systems
	computer networking; shielding and grounding systems (I believe you have done something in this area in the past); digital audio fundamentals and installation basics; studio design and considerations in the digital age; troubleshooting digital systems; digital console considerations
	Computer networks, including automation system networks, integration with business networks (traffic/music scheduling software), Internet, etc. It is a part of daily life.
	Computer Office and General use Software - Time Management - Major Project planning from beginning to end - Budgeting and Capital Improvement planning
	computer related
	computer related, certification reviews, MOM
	computer technology
	Consider an Economics for Technology/Engineering subject since that topic is primary to those that fund technical projects. Bing able to discuss technology fudngng with corporates is extremely valuable and lends further credibility to the Broadcast Engineering profession.
	Consider continuing with your "Mutual Admiration Society" culture.
	Considerations for embedded AES audio in a Television station. SMPTE AFD implementation considerations.
	Converging or merging technologies
	Courses for specific certifications.
	Courses on antenna systems, both A.M. and F.M. Trouble-shooting the R.F. plant. Modern transmitter designs.
	Courses to help get your SBE certification.
	Courses to help in future efforts for certification
	CPR/AED operation just in case.
	Data networking (Internet Protocol; routers and switches; firewalls/packet filtering and security).
	data networks
	Dealing with Idiots
	Detailed IBOC seminars, would likely require several to cover everything in some depth.

	Determining best format to offer to customers in the cable analog world. I.E. 720p, 1080i, Letterbox, Center Cut, ect.
	Digital audio
	Digital Audio basics
	Digital Audio fundamentals, Computer networking fundamentals
	Digital Audio, video and audio timing in the digital world
	Digital Broadcasting
	Digital Broadcasting fundamentals. Frequency coordinating.
	Digital M.W. RF planning
	Digital Radio Mondiale
	Digital radio/TV
	digital signal encoding, decoding, multiplexing multiple signals, etc.
3	Digital Television
	Digital Television systems, i.e. convergent media
	Digital Television topics - ATSC standards, 8VSB exciters, etc.
	Digital Television, HD
	Digital Transition
	Digital transmitter testing and maintenance.
	Digital TV fundamentals and formats
	Digital TV reception fundamentals
	Digital tv maintenance
	Diversity in the profession
	Documentation Standards Project Management for Broadcast Systems AV synchronization challenges for large remote productions
	DRM & IBOC differences & similarities, Am & FM Transmitter maintenance, problems in transmission systems associated with DRM & IBOC broadcasting
	DRM and DRM+
	DTV Audio Processing
	DTV PSIP
	Duties of the Chief Engineer including logs, eas, transmitter readings, etc. Since we are nearly all Chief Engineers these days, a good review/comprehensive course on all the stuff we need to remember to take care of would be helpful. I work alone and sometimes get involved and forget there are other things to remember I need to do. All this new stuff is fine but ther FCC lives in the past and there are many things, I am sure, that we forget to do to remain compliant.
	EAS and RF Transmission
	EAS compliance, Low Power TV and FCC compliance
	Emergency Communications
	Emergency operations and communication procedures with government officials.
	Emerging Technologies
	Encoding - Now and in the future (to include possible costs to upgrade system/tuner).
2	Engineering Management
	Engineering management, AM & FM RF
	Entry level radio broadcast engineering courses with a path to the more advanced levels.
	Entry Level training. Broadcast Engineering 101
	ESD safety- including real life examples such as the Apollo 11 explosion. Most people don't understand/realize what ESD can do. I took the MIL STD 1686 course with excellent instructors.
	Ethernet Network design, Analyzing Digital Video Formats (what applications are suitable for each type)
	Ethernet wiring for Broadcasters.
	Expand on what you have already started.
	Facility management, electrical code, test instrument usage

	FCC administrative law proceedings to help members understand the processes followed by the FCC
	FCC Rules and Regs.
	Fiber
	Fiber Optics, Networking,
	Fiber Optics, Datacasting, Signal Conversion
	Field engineer. Setting up a remote truck for a sporting event or promotin. Would include frequency coordination, audio and video dos and don'ts, safety, troubleshooting.
	File Based Broadcast Workflows
	File based work flow requirements
	File based workflow for TV (especially news based systems)□ HD program delivery/storage/file management/payout
	Final Cut Pro computer systems for HD TV
	Financial management
	FM SCA applications and techniques, both analog and digital
	For Broadcasters outside the USA, courses on Analogue to Digital Broadcasting will be most useful at this time.
	for radio: IP audio studio equipment implementation (as it relates to best design practice/latency issues/network design), VOIP telco studio integration..etc. merging of traditional TV and Radio plants to data centers, new venues for merged technologies (webcasting, YouTube) planning equipment/facilities for the migration into social networking as a main source of news/information into an existing traditional broadcast environment (Skype, etc.)..
	Frequency Coordination for events as well as day-to-day operations in any market
	Fundamentals of broadcasting to enhance interest in this field. Short quizzes to create continuing interest in learning more.
	General engineering fundamentals
	Greater support for higher education and academic work within the field.
	Grounding and Lightning protection
	Grounding Techniques
	Guided / directed / weekly discussion non-live SBE University rather than static content
	Guidelines on how to build a radio station from the ground up, starting with getting an FCC license.
	hands on programs
	Hands on training in the problems, especially system problems, unique to broadcasting.
	Have a look at Broadcast Engineering at the latest technology and industry trends. We're working with file based work flows, BXF, and moving to HD editing and graphic production.
	Have worked in NTSC environments in the past but not recently in TV at all. Would like series of courses from basic ATSC principals through the system to transmission and 8VSB.
	HD FM
	HD or any format conversion troubleshooting.
	HD plant and transmission. Digital Microwave. File based acquisition, editing, processing. Digital effects basics and troubleshooting. Newsroom editing systems. Station, production news automation systems.
2	HD Radio
	HD Radio advances, RF, IT
	HD radio fundamentals
	HD Spectrum measurment-equipment and techniques for AM and FM
	HD television systems and transmission.
	HD upgrade
2	HDTV
	HDTV for plant facilities
	HDTV fundamentals
	HDTV Transmitter operation and Maintenance. DTV Transmission.
	High definition acquisition, production and transmission.

	High Definition Monitor Display repair
	History from a working class perspective, especially as it concerns broadcast engineers; the history of IBEW, NABET, etc.
	How about - Communicating with Management (while performing the duties of 2nd Shift Transmitter Operator!)
	how to be a contract engineer
	How to keep your job!
	How to make a living in today's underpaid environment. Why be an engineer when the work is brutal and the pay is inadequate?
	How to make Broadcast Engineering your second career.
	Hrm... just thinking out loud and only because you asked, there's a lot of SBE emphasis out there on technical theory, but how about some sort in-the-trenches "modern broadcast engineering practices standards" type offering? From the punchblock walls to the tool benches to the computer network buildouts and password lists, every station I see is wired and documented (if at all!) differently - monetary cost factors being equal. It could be presented in a webinar with case studies and examples (What documentation to keep in physical notebooks and what to digitize or not even keep at all? Is it best to keep manuals and discs in a central location or attach them to each respective case? How best to document punchblock walls? Ideal punchblock spacing? Punch down grounds? Tie-wraps or velcro strap? Red-Black-Shield or Black-Red-Shield? Best way to file EAS ticker tapes? How much service loop wiring to leave? What sort of chemicals - wasp spray, leak detector, etc - should every transmitter site have? Tips on modernizing and standardizing what's already in place? Best ways to make sure documentation is kept timely? The balance point between "neat" and "reworkable" wiring, etc). Engineers take for granted that
	I actually would be interested in some radio history.
	I am a consultant for live remote broadcast, primarily entertainment and sporting events. I find that there is a complete lack of understanding in the general topic of server based workflows, the file-based standards, IT infrastructures in a broadcast environment and overall content management in a digital world.
	I believe that fundamentals of broadcasting is the most important. As a student in college I remember thinking that it would have been nice to learn some of these things BEFORE entering the work force.
	I believe your coverage is quite complete
	I do like the idea of developing some web and smart phone application courses.
	I feel basic info or an introduction to the field should be given as free courses. We write SOPs at work. I joined SBE to find everything is available for a price. Well I just paid for the membership fee. I am new to the Broadcast industry and I need basic information, to keep with standards. I know I can look to SMPTE but I was hoping to find, tips from the older guys, like in a corner of the newsletter? Not just announcements. Put some learning content for the new members to catch up with the fellows.
	I haven't taken any of the leadership/management courses, but it seems to me important that we (the majority of broadcast engineers) have the knowledge and skills to be able to deal with management. Most of us are one man shops and our only management is self and up (our supervisors/managers). In other words, we don't need supervisory skills, but we do need business skills and the ability to manage those who supervise us, like our GMs.
	I like the choices provided in the survey.
	I may be interested in the Audio certification.
	I really appreciate all the online courses that are available from SBE and am looking forward to more that are focused toward radio.
	I think a primer for people unfamiliar with digital video and what its limitations are. Fiber optic and satellite seminar might be a plus in regards how they can use it in a field application.
	I think that SBE is on the right track in what they are offering
	I think what you covered in a previous question is fine.
	I think you covered them all

	I want to use this space for a comment. Recertification education is very important. It is difficult for a very busy (working) engineer to determine which courses to take. Being that all certified members are required to take continuing education courses means that even the SBE National President and Board Members are also required to take continuing education courses. I would like to see published which courses that our national SBE leaders take. It would help many of us by giving us ideas on what we should take. I wonder which continuing education courses Terrance Baum or some of the others take. Thank you.
	I would like to see the SBE foot the bill for some more webinar courses like the RF Safety course. If not at least make more courses available via webinar.
	I would like to see more training and technical data on Fiber and fiber systems for Broadcast Systems
	IBOC - HD Radio - Broadband
	IBOC Fcc mask compliance measurements
	Implementing IBOC with AM Directional Antennas
	In depth training on digital video and audio measurements.
	Information Technology
	Information Technology for the Broadcast Engineer
	Interfacing Telephone equipment to broadcast equipment.
	Interference issues with WiFi, Cellular, and the proliferation of mobile devices. Although not specifically broadcasting, the borderlines between fields is blurring.
	Intergrating common audio software with automation systems□ Using software tools to give added functionality to off the shelf and broadcast specific software and systems.
	Intro Courses for High School and College students to get their interest in Engineering. These should be free or at least sponsored.
	Introductory courses for those seeking employment in broadcasting
	IP Audio
	IP Audio - both linear (studio) applications and remote connectivity applications. VoIP telephony for broadcasters.
	IP Audio Codecs, RF Theory
	IP basics
	IP considerations for HD
	IP related offerings
	IP Remote broadcasting
2	IPTV
	IPTV and digital TV in general. There are virtually no on-line or in-class courses offered in this growing field and offerings from a respected leader in TV training and certification (like SBE) would be of great value to those of us involved in the area.
	IPTV, Mobile Handheld
	IS for Broadcast Television and or Radio
	ISDN, IP remote broadcasting, Alternative Remote Control systems
	IT and it's relationship with Broadcast
	IT as applies to broadcast operations.
	IT courses, IOT tuning using proven test equipment also to listen and measure audio.
	IT documentation and diagrams with Visio
	IT for broadcast engineers- beyond introductory level.
	IT for Broadcast Engineers, OSI layers, protocols, IGMPv3, IPv6, other compression besides ATSC MPEG2 (other profiles of MPEG2 & MPEG4 h.264 part 10, JPEG2000 etc), what happens to my signal after it leaves the Tx? (Cable headends, DTH, IPTV)
	IT from the software side including the business computers. Operating systems, Office, integration of business software with broadcast software. In my radio facility I am the engineer and the IT person. there is no one else to handle all technical operations.
	it is stupid to have this a 'required answer' question
	IT Networking
	IT Networking, Web Design, Web/Broadcast/new technology topics

4	IT related
	IT Related Topics of interest to the engineers that are not comfortable with IT.
	IT systems as they relate to broadcast operations.
	IT Systems management/certification
	IT systems within the broadcast facility
	IT Technologys
	IT training basics at a minimum.
	IT, network, and LAN as it applies to broadcast facilition
	IT, Transmitter
	IT: Web, SQL (& other database apps), etc.
	Just Digital classes
	Keep up with the changes
	keep what you have
	LAN/WAN (TCP/IP), datacasting, web streaming, digital TV/radio
	Leadership, Broadcast Engineer Recruitment
	Leadership, the latest in Digital Television such as mobile technology.
	Link design, propagation studies, multipath
	Linux and IP security
	live remote operations/microwave link, airplay systems/asset management
	MAC addresses, Networking
	Maintaining video decks, creating cables, etc.
	Maintence of digital television transmitters
2	Management
	management online course
	Management and Leadership
	Management and leadership courses, proper audio and video monitoring and calibration especially HD.
	Management-- even if you are the total engineering department.
	management in the real world of broadcasting
	Management with inclusion of HR and liability discussions
	Managing HD video with DVI interfaces with HDMI/HDCP as it relates to more complicated installations such as routing switchers and fiber/twisted pair interfaces.
	Managing lean in a bad economy <input type="checkbox"/>
	Using the Internet for live news
	Managment relations.
	Many engineers I know are more introverts, Courses about how to show our priority to management that are not engineering types would be helpful.
	Maybe once I have finished with the ones they already affor.
	Maybe some short courses geared toward certification testing preparation.
	measurements for digial radio (NRSC G201 or equiv.)
	Mobile DTV, PSIP
	Mobile Technology for 8VSB Digital TV Transmitters
	mobile tv
	mobile TV, solid state amplifiers
	Mobile TV, TV color classes
	Mobile TV, ATSC data management, 5.1 surround and the distribution in the Master Control area. Multiformat production systems. Video file based distrubution in the master control area.
	Modern plant design and techniques of testing facilities.
	More basic skills for beginners.
	More courses on IP technology. Everything now has an IP address and computer networking is now mandatory.
	More information on digital broadcasting , encoding ssystems and how they work manufacturer agnostic, PSIP streams, etc. It is the new way of life for broadcasters & we should know how to make it work properly.

	More information on the IT field of study.
	More internet technology related - lots more <input type="checkbox"/> More satellite (earthstation, uplink, downlink) related
	More IT and Fiber Optics related courses with hands on, like fiber termination
	More on DTV Mobile
	more on network analyzers
	More on networking and How IP is useful would be dandy
	more on networks and IP technology as it relates to broadcast
	More technical courses...Courses specifically designed to prepare for SBE certification tests...
	More topics on mobile and hand-held TV: content operations, data management, RF/Encoder issues and setup, account management.
	Most of what I would like is already offered. I just haven't had time or opportunity to take advantage of it as of yet.
	Mpeg encoder
	MULTIMEDIA CONTENT MANAGEMENT, MEDIA ASSET MANAGEMENT
	multiplexing methods. codecs, transcoding, psychoacoustic processing and impact.
	NAB now has a two part course in basic networking (Cisco, not meet and greet) for broadcast personnel. Do we have a similar program or should we direct fellow engineers to their site?
	near future of digital tv
	Needed, but will probably not be popular: looking professional to be treated like a professional; business basics for engineers (i.e. how to talk to managers in their language, not technobabble)
	Network engineering for broadcast and VoD systems.
	Network Integration basics. (What systems work well with each other. (SW-Mac to Win to Sun to Lunix) (HW - SAN, LAN, WAN, MAN intergration to your Broadcasts Stations) IT management in a Broadcast environment. (IT practices modified to work within the BE field - What level of IT certification do you really need? {A+, Net+, CENT, CCNA, CCNP, Mac certifications, MCP, MCSA, MCSE, Avid, . . . }) Software Library / Software keys management. (what is legal? whats not? How to manage your keys properly and not get busted with fines when audited. -if ever) IT cost management - (when is it cost worthy to upgrade and what to use?)
2	networking
	networking (computer), Monitoring (broadcast resources for preventative measures), Networking security as applicable to broadcasting
	Networking and IP based technology/communications
	networking basics for engineers.
	Networking Basics to include router and switch configurations IP Protocols related to NGIP and Layer 3 Multicasting LAN design and basic troubleshooting with sniffer or IneoQuest monitor MPEG-4 Compression basics and configuration of encoders and mux DTV transmitter PA troubleshooting and repair
	Networking for HD Radio
	Networking principals.
	New alternatives for remote broadcasts with new technologies.
	NEW HD TELEVISION TECHNOLOGY.
	New studio technologies
	New transmitter / computer interface.
	No, You're doing a fine job
	No, continue the good work.
	Non-Linear Editing News workflow. Formats Files and Flips. Networking and Subnetting within broadcasting enterprise networks.
	Not at this time. What you've presented here is pretty comprehensive
	Not just safety, but actual operational course on ENG truck operations. This is a great opportunity to involve M/C ops and eng techs.

	Offer hands-on workshops on how to use equipment (both new and used) for beginners and engineers who want to further their knowledge in the industry.
	On line Master Control Cert. Course
	online certification
	Organizational skills,emergency management
	OSHA violations likely to be found at studio and transmitter sites. Example: unchained nitrogen tanks, blocked access to power panels.
	Outlining good engineering practice in "proofing" radio/TV signals at the studio; at the transmission plant.
	Perhaps some Certification courses on line might be a way to encourage more members to pursue certification.
	Power Requirements for Remote Broadcasts- -HVAC consideratons for Broacast facilities -Workplace safety for Remote Broadcasts.(Platforms, RF antenna placements, cabling within venues)
	Practical troubleshooting methods.
	Programing languages. I know that is a little far out.
	Programs that would help with certification
3	Project management
	Project Management, Emergency Management
	Proper personnel management, treatment of employees, IE: "people issues". Unfortunately, the TV industry attracts managers who should not be in a position of managing people, I've been told this by others with a long-time relationship in TV and I've experienced it. "Egg in the face" isn't nice but the truth must be discussed before any improvements can take place.....like visiting the Doctor and not telling what really hurts, therefore the proper treatment won't occur.
	Proper use of a GPS unit. There are too many engineers that have given my firm inaccurate distances and bearings trusting the GPS is always right.
	Proper use of stream analyzers as troubleshooting tools.
	PSIP
	PSIP basics
	PSIP, 8VSB transmission & reception
	PSIP, Broadcast monitoring (RF, PSIP), RF mask
	PSIP, Digital Audio, Digital Video, DTV Fundamentals (excluding RF), IT Networking for Broadcasting, IT Security for Broadcasting.
	PSIP, HD-Studio plant management and setup. Digital Video basic, Advanced. 8VSB Basic and Advanced
	R F Safety, site security
	regulation
	Related broadcast IT - referring to networking for HD
	Relationship of broadcaster Engineers to fiber transmission
	Relavant broadcast topics of the day (EAS, new products, FCC activities, etc.)
	Remote video encoding and web transmission.
	Responsible facilities management with shrinking resources
	Retraining in non-broadcast fields, for laid-off engineers.
2	RF Basics
	RF related subjects: Antenna, transmission line, measurements, etc.
	RF Safety is great, but I can't make this one! Will it be done again?
	RF Safety Basic Fundamentals of Broadcast Engineering
	RF Safety, General safety in the broadcast plant, ENG Safety Tower Safety Digital Streaming in the Broadcast Plant (Studio, STL, Transmitter) Digital technology interfacing/integration Analog to Digital transformation, Pitfalls & Success

	RF Transmission systems
	RF transmission trouble shooting techniques Basic Studio maintenance
	RFI and EMC
	Safety in workplace.
	Satelliet Communications, GSM technology, RF interference
	Satellite back-haul operations
	Satellite technology
	satellite technology and digital ota reception antennas
	satellite truck operator certification three phase power
	Satellite uplink/downlink or just about any chapter in the NAB Engineering Handbook breakdown to practical day to day terms.
	SBE certifications on digital TV and Radio engineering and operations.
	SBE engineer certification training course. Complete course preperation for all your tests.
	SBE is of great value for the broadcast engineer, but since it's a US-based society it's hard for aliens/foreigners to attend specific live, classroom courses. If SBE makes a "web-based" live feed of a classroom course it'd be great for us foreigners.
	SBE should consider a course introducing and stepping through the FCC application process. Included in the course should be the various "Exhibits" required by the FCC, what they mean and how to generate them.
	sd/hd and the bandwidths needed etc
	Security Ip TV
	See previous comment about OSHA regulations relavant to broadcast engineering. Another topics would be developing effective disaster plans for a broadcast station personnel and its facilities. And, safety and operational Standard Operating Procedures, Practices and Policies.
	Selected them earlier.
	Self employment business management, as many SBE members might be contract engineers, or considering becoming one.
	Should solicit manufacturers to provide webinar demos of their equipment.
	Since technology has changed quite a bit since I took vocational training in the 80's and 90's, courses in troubleshooting modern technology would be quite practical. Most devices now rely very heavily on Digital Signal Processing (DSP) for example.
	Since the broadcasting engineering moving much toward to softwares, I would like to see more courses on softwares; C, C++.
	Smith chart
	SNG
	solid-state FM transmitters tube replacement in FM transmitters
	Something for engineers who have been out of broadcasting for 5+ years that will give them the confidence to re-enter the workplace, with the newer technology. I have been out for so long I am afraid I wouldn't know my way around a station anymore,.
	Special topics might include a path (suggestions) or a refresher courses for someone who left the field (over 20 years ago) and want to get back into Broadcast Engineering. I've have a degree in Electrical Engineering (BSEE) and currently working as an Development Engineer; not active in Broadcast Engineering, per se. I joined the SBE when I was laid-off 4 years ago, but soon afterwards found another similar Engineering position. Now, my plans are to take SBE courses, when my current career dead-ends. Since I'm 52 years old and haven't done anything with my FCC General Telephone License in years, so I want to re-learn and get SBE certified. My hopes are to at least get a Part-time Technical position in TV or Radio.
	specific system design: what doesn't work, drawings, integration, operation limitations, display issues, format compatibility, value, resolution, aspect ratio, cut over plans
	Statistics, Human Factors, High Availability Systems, Quality, Synchronization

	Streaming technologies and methods.
2	Studio wiring (such as using balanced audio, AES, ip technologies)
	Surround Sound; format compatibility
	system integration
	Systems Test and Measurements for Radio and Television
	TCP/IP and Networking Intermediate Level
	TCP/Ipm, CISCO, MPEG
	TCP/IP; Networking; VoIP; Video IP and/or anything serial HD, file based related.
	Teaching people skills to engineers
	Technical benefits and considerations for migrating from analog to a digital plant.
	Technical Management of an Engineering Staff Practical Maintenance of your facility Maximizing your operation with minimal budgets
	Technology updates
	telecom
	Television master control design and layout, Maintaining quality control of on air product
	Television system RF maintenance and QC
	The fine opints of communicating technical issues to tech-RESISTANT managers in other departments. ie: The glassy-eyed stare when they really need to understand the implications of a decision. Perhaps the course should be delivered by someone who is not from the industry.
	The form wouldn't let me continue without typing some text here.
	The fusion of IT and traditional broadcasting. Specifics of emerging technologies like IP-audio
	The growing trend in IP based applications in our industry, from IP consoles in the studio, IP STL's, to IP controlled transmitters and monitoring .
	The list above included all but the IT/network classes.
	the news letter should have some technical articals on broadcasting, topics ranging from understanding HD signals and ASI encoders. You're previous articals lack interest and I have never used your directory to contact someone. I never keep them around and most of the time they end up in the recycle bin.
	The one I find myself most interested in is one mentioned earlier in the survey - PSIP. I'd also be interested in the various "flavors" of closed captioning and what to look for in equipment to translate between them (708 & 608).
	The one-person technical staff. How to manage projects when you're the only one on the tech staff.
	The Quarterly Tower Inspection Basics - Painting Conditions/Lighting/Guy-Wiring/Anchors/Weeding/Owner-Tenant Attachments/All Static-Grounding Points/Site Security/FCC-FAA Parameters Current
	The survey has covered this well.
	They seem to be covered in one of the questions.
	This form is flawed -- there's no need to force an answer
	This may just be an interest of mine, given my experience, but I think the convergence of IT and Video engineering is an area that could use some attention. I see a lot of movement towards highly skilled engineers that can understand and move seamlessly between Network Engineering (Data), Video Engineering, and that understand video production/post production workflows.
	time management
	Time management, Careers
	To initiate some type of program to prep for SBE Sert. Exams. All you offer is a practice test on disc to prep for the test. It is not enough. SBE needs to have a something for those who are wanting to enter the field of braodcasting (school, classes etc...)
	Tool use - SA, O Scope
	TOOLS AND PARTS AND TEST EQPT

	topics on Broadband technology used in remote broadcast.
	topics that keep engineers updated on current technology
	topics that would help Operations Managers - like electronics, understanding engineering, helping engineers
	Tower Grounding
	Tower maintenance
	Tower safety
	Translator for IBOC
	Transmission systems - general. Courses to help with attaining the next level of certification.
	Transmission Systems, IP Audio/Video, Studio Design. Signal flow.
	Transmitter Maintenance
	Transmitter maintenance best practices.
	Transmitter-specific, installation, maintenance, and trouble-shooting.
	Tuning TV Transmitter IOT & proof of performance With network Analyzer
	Understanding ASI and IPTV
	Updates on DTV
	Use of test instruments & development of trouble shooting skills. (e.g.: A recent Fluke seminar on thermography was excellent.)
	VHF Hi band issues, psip programming and resolving issues, problems with set top boxes- the good and the bad, Which boxes do not follow-standards, inside antenna for VHF - gain of antennas - VHF-UHF combo,dealing with the public on reception issues.
	Video Capture and Archive Systems, Streaming options
	video compression systems.
	Video Compression and encoding.
	Video Engineering - How to read a DSC chart vs. MacBeth. Audio Engineering - Mastering 5.1 Engineering Management, RF - ATSC, DVB, H.264
	Video file types and standards. ASI types and standards. Networking for broadcast tips.
	Video over IP. Any IT type course that pretains to Broadcasting.
	Video Server Technology, PSIP, MPEG Video, Digital Audio, Studio Transport Stream Technology, Cutting Edge Technology
	VNA Measurements on Transmission lines
	VOD, IPTV, IT for Broadcasting
	Voice Telco Networks and Studio Interface Systems
	We are content providers, video editing/production; and I'm looking for more specialized offerings and looking at how others do things. We also work with a lot of video conferencing or distance learning systems, so looking at those as well.
	We sell a training course for our equipment and have had mild success with that program. The problem has been getting engineers to attend. Their lives revolve heavily around their jobs and for them to take the time to attend a training course is a huge challenge.
	What is the real future of IBOC. Did we have a bill of goods sold to us. Why interfere with one billion analog receivers when there are less than one-one-thousandth of IBOC radios in service?
	Where ever there is technological change happening. I guess that means almost any topic.
	Why does this question require an answer? I don't have an answer for this...
	World of television and Video. NO more radio!!!!!!!!!!!!!!!!!!!!
	Writing and speaking courses
	xml xsd training; .mxf .mov sturcture; advanced network protocols and manangement metadata and database structures.
	You covered this well.
	You have a good list of possible courses.
	You have covered them.

	<p>Younger folks I know have enough electronics background to get started, but there are just so many technical, legal, safety and other issues about transmitter sites that there needs to be a course on those...not a course on specific equipment or technology, but a course on managing transmitter sites. But I think at least a part of this course should include a laboratory experience at a real site, either TV or radio, or both, depending on the student's needs. My experience with trying to get such a lab going has been completely negative so far. So that's prevented me from just going out and doing this myself.</p>
	<p>Your list is pretty extensive. Maybe something with the low power TIS/HAR AM broadcast stations that have been erected in many cities, and now don't work right, or work at all !</p>

Society of Broadcast Engineers Training and Development Survey	
Other Comments:	
Response Count	
185	
Answered this Question-185	
Skipped this Question - 817	
#	Response Text
	(Note: I have previously submitted this feedback after taking a course) The course I took was a reprint of a series of articles in a trade magazine. While it was convenient to have all that information in one format and location, I was disappointed that it did not provide new and more in depth material.
	A "Scholarship" for courses would allow SBE courses to be more affordable for members who's work place do not provide for continuing education.
	A web forum would be great for networking and sharing information.
	An Advance Certification for Nework Technologist (i.e. Certified Broadcast Network Engineer) would be an important certification to add.
	As a consulting tech I find myself doing more with two way radio, etc. and less with broadcasting - and broadcasting seems to be doing with fewer and fewer people.
	As previously stated, I am a Life Member and in retirement. My answers were as I was last employed in Radio Broadcasting. I was an early SBE member of Chapter 70 and served as Secretary for several years. Even being retired nearly 20 years, does not diminish my interest in SBE affairs and I wish this fine organization continued success. Richard N. Dain
	being 3 years or less away from retirement, I see no personal need for these programs.
	cant wait
	Certification training materials too broad, vague, outdated and expensive. Specific course needed to pass tests. Your CD is a good start, but it is incomplete. Taking books to a test is outdated. Engineers get information from the web now. Since you are a book seller, I expect no change. So, at least print the publishing dates of books you sell on your web site. Thanks
	Computer basics is a must! But, how much IT knowledge do we really need? I believe that IT and BE are starting to meld - if not already! I As a young IT based BE I see that a huge change in work-flow is being moved to SAN / LAN / PC / Mac maintenance. Yes, engineers are able to pick up what they need to work on a day to day basis, but huge chunks of basics are overlooked for the "will it work" or "all I need to do is a reboot" thinking.
	Considering how the industry dislikes engineers and doesn't trust them, the need for management courses is higher than ever. If engineers are going to work in the environment that broadcast has become they're going to have to understand the psychology of how sales managers think.
	Continued training is a vital part of any job and with the speed at which our industry is evolving training is essential. The problem is with corporations cutting back on the technical departments both with personnel and budgets it becomes an exercise in scheduling. I think it would be VERY good to have Web Based training sessions that could be viewed at any given time. I have signed up for several webinars sponsored by different companies to try and get training however more than 50% of the time something else has come up to stop me from attending. So if there were an archive of training sessions I could view from that would be excellent.
	On another topic, I do not have any certifications and at this time I see no reason to change my status. Reason being, and I feel sure you have heard this before, there is no advantage for me to be certified except for my personal benefit. Whether or not I am certified will make no difference in the amount of my paycheck. Now that may sound trite and simple but it is none the less the bottom line. I think SBE should meet with the major group owners and see if something can be done about that. It would benefit the owners to know that their technical staff is indeed "up to snuff" on the job they posses. I have been in this business for 30 years this year. I carry a good reputation among my fellow broadcast engineers so I feel I have earned the right to lay this topic on the table.
	Cost MUST be reasonable as most companies do not reimburse expenses.
	Cross certification (Cisco, Microsoft, etc) credits toward SBE re-certification
	Develop means of recruitment
	Do you know anyone in eastern Washington state who's hiring? I've got a PDF file of my resume available.
	Don't allow members to hold office unless they are certified.
	Don't have Hi-Speed connection for webinars. need to have them be on-demand can't do real-time streams.
	Don't require webinar attendees to use computers running Microsoft Windows or Mac OSX (i.e., allow those of us using Linux or FreeBSD to participate also).
	Ennes workshops are a better learning experience than watching somebody talk on a PC screen... one gets to interact more with the instructors, and one gets the opportunity to touch and feel equipment (make adjustments, etc.). I know more and more institutions are going "on line", and it's better than no education, but it's for our trade, it can never replace the hands-on experience of actually doing the it. (I know "Broadcast Engineers" that don't know how to solder an audio connector or properly wire a modular connector.) I don't want a mechanic to work on my car that has only watched somebody talk about it on a PC screen; I want him/her to have actually used a wrench at a factory training class.
	Ever since the FCC backed away from testing, the industry has suffered. Finding and getting qualified individuals to manage digital systems has been a challenge. I'm glad to see SBE take up the challenge to provide education and certification. We have grappled with providing certification on our gear, equivalent to Cisco Certified XXX type programs but have not seen a big enough uptick in business that would warrant the huge effort to launch such a program internally. Externally offered programs may be a better way to offer such education.
	For the engineer in a downsized environment - juggling even more facilities than in the past, SBE has lost much of it's luster as a valued organization. I remember the "good old days" of SBE meeting with relevant radio topics and brushing up my skills. Today, we just tried to get everything done in the time available, eat sleep and do it all again tomorrow.
	Had fun with the above cynical remarks. Hope you enjoyed them too :)

	Having helped develop two courses for SBE University (I'm already on the Education Committee, of which my boss is the head) I can attest to the effectiveness of this form of education. Quite awesome, I would say.
	I am a broadcast professional working within a non-broadcast industry. My employer provides webinars specific to my job (telephone, CDMA, satellite, transmitter and tower operations, etc.) but will not allow me time off to attend training not approved by them.
	I am a one-man band. I can't get away during the academic year. My only chance for this or any type of travel is during the Summer session, assuming no courses are scheduled.
	I am going to attend the RF Safety Course this evening here in Tulsa Oklahoma.
	I am not currently or have ever been employed by a broadcasting company. I would like to make myself marketable to a broadcast company. What courses and/or certifications would you recommend? I already hold a lifetime general radio telephone license along with an extra class amateur license. Thanks for including me in your survey.
	I am RETIRED from FULL TIME broadcast engineering, but contract with 2 stations. Many of the responses in this survey were based on training before my retirement from Clear Channel. My current "employers (contract) do not pay for training.
	I am still very happy about the day I first discovered SBE through a fellow employee. I had been working in the engineering dept. for 5yr's and had no idea how much of the material a broadcast engineer should know, I actually knew. I took the Television Operators exam, which I felt was very remedial and more geared to maybe a master control operator. I had planned on continuing my certification one area at a time starting with video then audio and so on and work my way up to the Broadcast Engineering certification. But when I started reading some of the study material I bought off the website and the internet I realized I knew enough to take a shot at the CTBE certification. So I did and I passed. It really gave me the reassurance I had been lacking about my qualifications. I had planned on taking the VSB 8 Cert. exam this year at NAB but was denied the time off by the new chief engineer. I plan on continuing my knowledge base thru SBE certification exams and study materials. In feel it's a great organization filling a very important need in our industry.
	I applied for and paid for the course but couldn't access it. (Kimberly sent log-in information to this respondent)
	I assume very few SBE members have assistants, so leadership is unfortunately not an important topic. For Regional managers or DOE's it is but not for the contract or cluster engineer since they do not supervise, hire or discipline employees.
	I do not endorse learning by proxy. I prefer a live instructor in the room I am sitting in. Have not had very good luck with "internet" or long distance classes.
	I find it helpful to provide video recordings of webinars so I may attend at my leisure.
	I had to really pitch to my boss to convince him to let me attend that Leadership training course that was suppose to take place in Indianapolis this last August. At the time I signed up, there was no indication that there was a possibility that the course could be canceled if a certain enrollment threshold wasn't met. If I would have known that, I would have waited to purchase my plane ticket. I was very angry that the course was canceled with short notice, as it will make it that much harder to convince management to pay to attend these in the future. If you are looking for ways to increase enrollment/interests in these types of events, I would strongly suggest you either figure out how to keep the promises you made with regards to event scheduling, or put a disclaimer on event listings if there is a possibility it might be canceled due to low enrollment.
	I have been a consulting radio engineer for over 36 years. The monthly meetings and Larry Bloomfield's NAB Road Show are excellent times to keep learning. I will eventually have high speed internet service and will then be able to participate in SBE online training. Keep up the good work!
	I have been working in the broadcast engineering field since 1954. Started doing radio remotes while in high school. Worked for college station four years (1956-60) while earning a BS degree specializing in industrial engineering technology and business administration. Have worked primarily at four full power TV stations (one with FM station) since 1960. Have been Director of Engineering at current station since 1982. Three years ago (on July 1), I cut back to 25 hours per week--same job and responsibilities (had good A.C.E.). July 1, 2009, I switched to part-time and became Director of Special Projects, and work 15 hours per week (5 hrs on T, W and Th). At this point, I am not interested very much in taking a lot of continuing education courses.
	I have viewed three webinars. I felt that the topics did not need to be presented live. They could have been put up on the website to be viewed/used at any time. The q & a part was a disaster, with questions streaming in and not being seen by the moderator.
	I intend to take my CBPE certification on my next trip to the USA.
	I lost my position due to the economy and positions were terminated. It has been a difficult time.
	I need to check into the online courses and see what is all available.
	I perceive my SBE membership is of little value to me as a television broadcast engineer. The LA chapter seems to be over represented by radio types.
	I recently took the Video Engineer Certification exam - which is slightly different from the scope of this survey, but I think my thought applies across both areas. It felt as though the test (and official SBE test prep stuff) contained a lot of information that really has become almost trivia as time has gone by and technology has advanced. I am not really old enough to have done a lot of work at the board level of electronics, nor have I had to deal with a lot of regulations that changed 15 or 20 years ago. My background was based on growing up with computers, working through various broadcast and video production jobs, and working for a computer networking company - with a lot of training along the way. For the past several years, I've designed, built, and maintained studios and production facilities - I realize that results in me being some new kind of video engineer. It would be nice to see the training courses, the certification exams, and any test prep materials get some updating particularly in the networking technology area. one example - I'm not sure I've seen the word "router" since the late 90's and even then it was in an almost historical context. I know such an undertaking of reworking all the tests and courses and materials is a substantial one. All that being said, I am
	I was just thinking, While we just built our station, we bought a lot of gear that we cannot use. We have Gps Mpg clocks and cross converters that we are not using. I was thinking that if we inside the society, had like and insider trading, to swap gear between stations looking for a good deal, and others that have parts to the transmitter or tools and equipment that they have no use for. our stuff is new in a box and sitting in a corner, waiting to be antiquated. Let trade within this community, knowledge, jobs, training, stories, what do the old guys know that I don't. That is why I joined the SBE. Thank you for your time.
	I was not familiar with SBE university. I plan to check it out.
	I would certainly need updates on the Broadcast technology upgrades from time to time. but I live outside the USA(specifically in the M.E) so online updates will certainly help.
	I would like to see special pricing for strong books on topics important to new technology in our industry. An example is the book "PSIP: Program and System Information Protocol Naming, Numbering, and Navigation for digital Television" by Mark K. Eyer. This book received great reviews and is hard to find now.

	I, like many others, have found myself in the involuntary part-time category. This has put a crimp in my current budget and I now think twice before spending money on anything; even education. For now, I glean as much information as I can from local chapter meetings, publications, and webinars. Typically, these are things that are affordable and can provide useful information on a limited budget.
	I'd like to finish my college degree, and while the SBE partnership with Excelsior College is a great idea, it is quite expensive to attend. If any other partnerships could be arranged at a more reasonable cost, I think it could be a huge asset to the SBE national and membership.
	If the course materials were available for a reasonable price, I would be interested. I have gotten used to self-study. I am so very disappointed that the Government, and I work for the Navy, doesn't recognize Professional status, such as the CPBE or the P.E. The Government tends to promote a lot of folks based upon some obscure management capabilities, but no emphasis on demonstrated skills or abilities as shown by Professional licenses. They don't even recognize their own Acquisition Professional Community status, which I also hold.
	I'm currently not working in the TV industry. Therefore, it might occur that my certification will expire. I'd like to keep it current without a lot of hassle but it seems that is not likely. I may even drop my SBE membership. That, unfortunately, is just reality. Also, since I am not at a TV station, the only way I could attend a Web Seminar is at home and I only have a dial-up internet connection. This probably would prevent my participation.
	In fact, I'd say that's a problem with the webinars and distance learning in general. Most of what I know about broadcast technology came from doing, not reading (although I've done a lot of reading and continue to do so). What's really missing is some kind of apprenticeship program, like electricians seem to have. Your AM DA course is an example. I find you can read about that topic til the cows come home, but until you've had to make measurements, do adjustments and get it to work in the real world, you'll find you know just enough to be dangerous! The people who do know what to do always are people who've actually done it a lot, first with other engineers, and then on their own. But the system that supported that, small as it was, has been killed by consolidation. Ownership/management will not cooperate at all when it comes to supporting a meaningful system of apprenticeship ("elmer-ship" to us hams). They don't see that there's any benefit to their bottom line, and they fear legal liability in some cases. So there are fewer and fewer opportunities to work with others in a learning environment for young entrants. Pretty soon, there are no elmers and you have a complete lack of skilled people. We're almost there, and I think I can speak to this because it was a problem even back
	In the current economic environment, many engineers are either unemployed or have been forced to accept temporary employment in non-technical areas. A well thought out course intended to teach the basics of working "free-lance" with the option of establishing an engineering consulting firm would be helpful to many engineers including those whose current employment situations are subject to volatile and uncertain economic forces beyond the abilities of their current employers to manage.
	Industry Canada Requirements not just FCC would be nice though probably similar.
	It would also be good to have something to attract young people into broadcast engineering.
	It would be nice if SBE could hold meetings in different parts of Northern CA...I live in the Redding area and work as a field engineer...I am not available to drive down to Sac once a month for the meeting...Would be nice if every once in awhile you could hold a meeting up in the Redding area...
	It would good to look into doing courses, with verifiable testing, in components that lead to SBE certifications. i don't have time to study and practice for an overall test. This method would be more beneficial to me...I could learn and earn credit towards certification. The current system is backwards and time consuming...with my work demands I don't have time for an all-at-once test.
	Just want to say that all of you have done an outstanding job please keep up the all the outstanding work.Sincerely,Bob Walkney,Broadcast Systems Engineer.
	Keep up the good work
	Keep up the good work, your enthusiasm and efforts in the merging fields of technology "almost" make me want to go back to work. Good luck. Bill
	Keep up with the great offerings and support for us broadcast engineers!
	Location is everything. If I can drive to it, I can usually attend.
	Many of us depend on monthly periodicals and vendor information to help us keep up to date on the technology not counting the many technical books we purchase. However there is no way to count this educational time toward recertification. Countless hours spent researching various projects we manage or the education we get while installing and commissioning new equipment, interfacing it with the rest of the plant should count toward the recertification. Many of us learn plenty when making an Avid system talk to a Sony player that ingests into a Leitch video server and archiving on to yet another brand of tapless based system. We get a paycheck for this but then we go home and try to find a course that will give us recert credits. There is an answer. Help us find it.
	Membership should include a subscription to Broadcasting and TV Technology magazine and/or the opportunity for individual subscription.
	More articles about organizing SBE into a de facto engineering union.
	More courses with hands on troubleshooting of RF, IP and HD video and audio
	Most engineers do not know the procedures on FCC application.
	My answers may be slewed because I am retired and do very little engineering now.
	My local SBE chapter (Denver) offers little of interest to radio engineers.
	My responses may be weighted due to the fact that I consider and believe that I learn the best with new material by READING hardcopy and when possible -applying real APPLICATION / Experiments / Hands On.
	Offering online courses and online testing would be very helpful.
	Offer trivia contests in The Signal newsletter and give shirts or caps as prizes.
	Online Courses will be more access-able for all working SBE members and Engineers
	Perhaps more publicity would be beneficial to the members about educational opportunities. Either there has been large amounts of publicity, or I just missed it, because I can't recall seeing all that much.
	Perhaps there could be some free sample mini courses available from SBE University. That could generate more customers in the long run.
	Please pay attention to those of us who have to do this 'on our own'. Prices need to be LOW for individuals that have to pay for this themselves. Same with time, if it is on 'personal time' not company time.
	Please will you look at reducing the cost of training online.
	Recert credits not important personally since I am life certified but it is an important consideration overall.
	SBE can not limit itself to 8vsb as the defining technology of broadcast engineers. all new media is ip data and databases in which I find broadcast engineers completely unprepared to continue their careers.
	SBE HQ should promote the taping of relevant local chapter presentations and their posting online. Look at what Philadelphia SBE18 has done so far with a \$200 mini-DV camcorder: http://philasbe.blip.tv
	SBE is a very important organization.

	SBE online courses, webinars, and workshops have helped me develop a direction in which to pursue not only skills but career choices. Thanks.
	SBE Really ought to take a strong leadership role in this. Look at digital TV. Turn a light on in your room and the sound blips. Trees blow in the wind then the picture breaks up. Did we jump into this too soon? We did with NTSC -- PAL and SECAM learned from our mistakes and came out better.
	SBE University? Didn't know it was there. How much does it cost? Free, or low cost to members?
	smaller courses. An example:RF safety was one which encompassed a wide ranging subject which ended up only touching on a lot of areas but I never really felt like it got to the meat on anything.
	Some preps or insights as to what is expected or required for certification exams or web sites for studying for exams.
	Study materials and references of the current course need to be updated to make the current testing.
	Thanks for the efforts made to put together what is presently being done! I would suggest some reduced cost group rates for 5, 10, 20, etc attendees, especially with on-line courses. Also, perhaps one could "hire" the SBE team to do live instruction at a staff seminar (or local SBE meeting)
	Thanks SBE for your Support
3	Thanks!
	The certification renewal requirements should be eliminated and should instead be dated certifications. I held a CBNT certification and allowed it to lapse, not because I didn't have enough of the required criteria to renew it but, because it was more effort to compile the data and submit the proof that I had continuing education than it was to take the test again. It would be like taking away your college degree because you didn't continue to prove to the university that you were still using the skills you had learned and learning new things. Once the certification is achieved it should be irrevocable but, should indicate that the certification was earned on a specific date. At some point the certification would become stale and would no longer be as relevant and would need to be refreshed by retesting to show current knowledge to a prospective employer. When my CBNT lapsed I saw that the whole process of certification through SBE would only be relevant to me if I were looking for a new job and collecting certifications over time would be fruitless as they would potentially expire before needed. As a result I no longer seek SBE certifications.
	The core body of knowledge of the profession of engineering far exceeds what the SBE certification covers, i.e. mathematics and physics. SBE should have minimum educational requirements for certification. Degrees should be from accredited institutions.
	The coursework for CBNT was practical, but I really felt that it needed quite a bit more focus on IP, troubleshooting common network problems, and considerations when designing a network. I had training in this when I was in college, and I deal with this on a regular basis as a broadcast engineer.
	The idea of this kind of survey is excellent. For those who have ideas which come to them after completing the survey, you might want to consider putting a "comment submission page" at www.sbe.com .
	The Internet is rapidly becoming a primary broadcast delivery platform. Eventually, traditional terrestrially transmitted broadcasts will become secondary to the Internet.
	The online courses are convenient
	The questions asked about employer/education are non applicable- I have not had the occasion to do anything in re: to contin. ed. <input type="checkbox"/> But I am pretty sure CBS would allow for somethings, I really don't know and I am not going to inquire at this time.
	The SBE needs to do a salary survey. There is no current information for us to use to justify wages.
	The SBE seriously needs to jump on the issues of audio levels and the current lack of standards in the digital transmission chain. At my facility alone I have promotions fighting with programming, media management caught in the middle, encoders and/or receivers with different default settings, continuous arguments over dialnorm settings, and basically our audio levels are all over the place when our signal hits the home. Apparently everyone is having this problem since pretty much every channel sounds ugly these days...
	The seminars / Webinars should focus on training. If specific equipment is demonstrated the theory behind that equipment should be taught, and other equivalent equipment should be shown. Many Seminars / Webinars are nothing more than sales pitches, and when you confront the presenters with questions they lack the knowledge to explain the theory.
	The test for the CBNT was so far out dated that it was a unsettling. I could not believe that there was actually questions about 10base5 and 10base2 networks on it. We are working on systems now that are in the 1GB and 10GB range and coax based systems are not even around. Fiber and CAT6 cables have long been in use and have left these long behind. Please do me a favor and update the test.
	The Testing for the courses and how to get prep material has not been clear and what I need to do, Each Engineer has the set skills that He or she Has learn or deals with in their part of the Job. How do I match my training to the questions being asked on the SBE test. I work on the transmitters, Reciver, Audio and Video more but not enough on computer side were other work on computers more but not much with Audio etc. so where do we fit in todays Broadcast Engineering.
	There are those of us who still have older analog consoles, yet would be interested in gaining technical understanding on at least one of the proven digital formats/consoles. A different way of thinking is required in intalling, operating, and troubleshooting these systems when compared to the systems we may still currently operate. Some additional instruction on layout, particulars with how gear is interconnected and communicating (DSP) would allow us to more easily understand/embrace new systems and the technical considerations/expanded-capabilities involved with them.
	This depends on cost and if time is allotted to attend
	This survey would be a lot more relevant if it included options for retirees who have to pay their own way.
	Today's Engineers do not have a strong base knowledge and it is hurting the industry greatly.
	Too often, work varies such that it is hard to plan for a specific time. I think the SBE should think more about the erosion of the profession. When I started in this field in the 70's, stations had engineering staffs. Then, engineers were part of the creative force because there was enough time to think, study, and come up with things that were truly useful for the station. Of course the SBE would have to be more political to lobby for this, and this is something the SBE seems to fear. Its really a shame.
	Training is becoming essential. There are a lot of technical skills required to be an engineer in broadcasting today and few places to go for training other than OJT. Having training available may also attract young people into this field that may not have considered it as an option.
	Traveling to seminars is difficult for me. It takes a major effort to get coverage so I can take a one week away from town vacation each year. Any other vacation I take must be in town and on call.
	Very important to keep costs reasonable. I think that current test study guides are pretty dear at \$27 / test.
	Very thankful for the SBE and it's educational programs.

	We do not have a SBE Group in Mobile Al. The nearest one is in Montgomery Alabama. 175 mile trip one way. I would like for all of my Engineers to take the Certification test. I can not afford to send them to Montgomery so only certification test would be great. We could take the test on line at the office or at home. We could then keep everyone up to date and not spend all our time driving for hours just to take a test.
	we hope the cost will be cheaper.
	Webinars availability as archive to view later or if you can make to the live event you can still benefit from the information. Also checkout this site www.techonline.com it has a lot of good sources for webinars, courses. and white papers for engineers
	When I went to school we learned science in three ways; recitation, labs and lecture. <input type="checkbox"/> A "webinar" only replaces lecture in the full learning process.
	With very little, or NO support, from employer it's very difficult to consider any kind of reasonable participation. Maybe you should consider an attempt to 'inform' the industry's General Managers of an Engineers duties and responsibilities.
	Work loads and topics of interest change all the time. It is difficult to predict time availability and topics of interest.
	You do not have any boxes for does not apply on a number of subjects. Thus how valid is this survey? Also, can the Web lectures be purchased, such as at cost, on DVD for latter reference?
	You need to add DNA to the choices for those of us unemployed or retired.
	you need to adjust questions so a comment could be added and not mandatory

Society of Broadcast Engineers Training and Development Survey

The Society of Broadcast Engineers is currently seeking technical experts to create online courses and present webinars. If you are interested, please put your name and contact information below and someone will contact

Response Count
89
Skipped Question
913

	Response Text
1	sdixon@kpvi.com 208-251-9223
2	Jonathan L. Kramer, Esq. Kramer Telecom Law Firm, PC 310-405-7333, Kramer@TelecomLawFirm.com FCC/Legal issues related to RF safety; Dealing with local zoning boards.
3	Doug Irwin, 212 549 0612
4	I did this before and nobody followed up - I would be willing to make an on-line course on computer networking/LANs once given a set of topic learning objectives which might be gathered from industry. Sort of CompTIA Network+ like classes. Paul Claxton - paul.claxton@dma.mil
5	Robert Griffiths Griffiths.broadcast@usa.net
6	David B. Robertson, A.A.S., B.B.A., M.S. SBE Certified Broadcast Technologist (CBT), dave.robertson3@gmail.com
7	Steve Ellis, Assistant CE WPLG 3401 West Hallandale Beach Blvd, Pembroke Park, FL 33023 954-364-2604 (office), 305-218-5467 (cell) 954-963-8560 (home) sellis@wplg.com
8	Mark Watson, mewatson3@juno.com, 760-622-4872
9	Kirk Harnack, Telos - Omnia - Axia, kirk@harnack.com
10	Len Watson Scope+Focus, Inc. len@scopefocus.com, (c) 904 923 6687
11	Thatcher Graham 484-354-6918. I am the Sr. Field Engineer for Mediaguide, a radio monitoring company whose data is used by ASCAP for royalty disbursement.
12	I am not all that experienced in the BE field, but I am constantly studying for IT courses. I am an A+, Net+, MCP, MCSE, and held several Mac hardware and software certs. I will not be able to teach a course, but I will be able to help corroborate and provide technical information. Anthony L Singleton, asinglal@yahoo.com
13	William T. Hayes, hayes@iptv.org
14	I'm already involved. Art Reis, WPWX Radio, Hammond, IN. 219-933-4455.
15	John FX Browne PE, jfxb@jfxb.com, 248 642 6226
16	Roger Newton, Chief Engineer - Tulsa Oklahoma Educational Television Authority 811 N. Sheridan Rd., Tulsa, OK 74115-7832, V) 918-838-7611, F) 918-838-1807, C) 918-520-4165, rnewton@oeta.tv
17	Have written and taught the HD modulators to all DirecTV engineers in Tucson and Castle Rock in 2009. Please contact me via my website: ajnengineering.com, Alan Nichols PO box 373 Kaufman, Texas 75142, Email: anichols6330@msn.com
18	I wish I had the time; my mom is near death. Perhaps I can give you (probably unpopular) views and things to think about. We've got one more chance to do FM Digital Right. If you really care, look at the formal comments that I filed with the FCC under 93-325. And start wondering why so many stations are so hot to put first adjacent stations on both their sidebands. Fifteen years ago, they would have protested like hell and OET would have laughed the matter off the table. Measure twice, cut once. This is our last chance. Deborah S. Proctor, WCPE (800) 556-5178
19	Henry A. McKelvey hmckelvey2@comcast.net, FiOS and Fiber Optics, PON Technology and how it can be used in the Television Industry, WPON, GPON, and BPON Technology
20	Mike Seaver, meseaver@comcast.net
21	jack leishman, k8xx@chartermi.net
22	Ralph Beaver, bevo@mediaalert.com
23	Ron Martens, 791 Walnut Knoll Lane, Suite 3E, Cordova, TN 38018, 901-229-3552, Ron@air1.com

24	Francis Fasuyi Newport Television Group 5904 Bridge Street, East Syracuse, NY13057 315-440-2305
25	Steve Mendelsohn, Frequency Coordinator: New York Jets, Presidential Debates (2008), Pope's visit to New York stephen.a.mendelsohn@abc.com
26	Jeff Koscho, 703-676-8926
27	Master Control, Broadcast IT and Systems Integration topics. Michael Liebman, Senior Engineer, Advanced Media Systems Group Fox News Channel Office: 212-301-3681, Mobile: 347-565-4326, Email: michael.liebman+sbe@gmail.com
28	Jim Turvaville, Corporate Director of Engineering WAY-FM Media Group, Inc 5475 Tech Center Drive, Suite 210, Colorado Springs, CO 80919 719-533-0300, turbo@wayfm.com
29	Carmelo D'Amico 907-463-2526 (home), 907-957-1593 (cell) Email cardam@bigfoot.com
30	frank.w.bell@usa.net Cp:(973)460-0722, EAS Improvements
31	Kevin Southern, Member Number 24377, 318.617.4325
32	Sam Wallington, VP of Engineering, Educational Media Foundation swallington@emfbroadcasting.com, 916-251-1600
33	Would be interested in working with others in a cooperative effort - Guy Partridge, CBT, CBNT - Tel: 502-413-6918 or Email: txquail@airmail.net (50 yrs Bdcst experience)
34	Nimal P. Gooneratne 10, Piliyandala Road, Maharagama, Sri Lanka email: nimalpg@sltnet.lk, 011 2850813
35	Steve Lampen, Belden 415-531-4668, steve.lampen@belden.com
36	Although I am a 36 veteran in Broadcasting (am,FM and TV) I would not consider my self an expert.
37	Tom Ray (presently tapped to author an HD Radio SBE University).
38	Ron Barnes 860-681-1044 ka1kjz@cox.net Remote control, microcontrollers, etc
39	I am an expert in RFI and EMC issues, and regularly present tutorial workshops on the topic. I would be happy to present to the SBE, both to local chapters and on the web.
40	Michael DePhillips, 630-981-4386, www.dephillips.com, michael@dephillips.com
41	Ben Wong, KOVR-TV/KMAX-TV, bwong@kovr.com
42	Fred Allen, fallen@idcelectronics.com, 678-429-7837
43	Maurice Swain, maurice.swain@kxan.com, 512-417-3610 cell
44	Adam C. Loyd, Loyd@edr.com
45	Rodger Washington, rWASHINGTON@scrippsnetworks.com
46	Jim McTigue, (650) 279-1621, j.mctigue@impulsiveaudio.com
47	Very interested. I am an experienced instructional designer. 619-252-5943
48	I would be happy to help. I am experienced in Radio automation, Networking, and communicating with non technical people.
49	David Prenoslo, Broadcast Engineering Technician, TELUS TV, david.prenoslo@telus.com
50	Dennis Baldrige info@7db.net
51	BILAL HASAN CELL # +92 321 9200448 ADDRESS: FLAT # 501, SALEEM PLAZA, GULSHAN E IQBAL, BLOCK - 16, KARACHI, PAKISTAN
52	Joel Wilhitem, Solutions Manager - Broadcast and Satellite, Harmonic Inc. 549 Baltic Way, Sunnyvale, CA. 94089, (408) 490-6403 Compression Technology and System Integration (PSIP, Multiplexing, Splicing, Transcoding, Contribution/Distribution, Watermarking, Monitoring)
53	Ted Nahil, MCSE, CPBE, tednahil@bellsouth.net, 772-340-0850 (work)
54	Sure, I'd like to assist where I can. If you are considering venues, take a look at the Engineer's Club of Dayton (Ohio)... has a 400 seat auditorium and can serve dinner to up to 200 of them (dinner costs.... the auditorium I can use cheaply). Centrally located.... Indy/Cols./Cincy.... then include Cleveland/Pitts/Chicago/KY.
55	Robert F. Nelson, rfnelson@ksu.edu (I wouldn't consider myself an expert on anything, however!)
56	Neil Vickrey, nvickrey@msn.com, Satellite uplinking
57	While I'm not sure I would meet your standards as a technical expert, I'd be happy to help in any way I can. Mike Frezzo, mfrezzo@gmail.com