

Ham 32 - STEM or HAM

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1. STEM. What is it? Science, Technology, Engineering, and Math.
STEM. Who has not heard of it?
2. STEM is the recognized, preferred educational path to provide societal development, an excellent lifestyle, and a foundation for learning. Virtually the entire structure of what we regard as a viable lifestyle comes from STEM. Our quality of life is directly dependent on STEM.
3. What do you want to do as a career? After discussing with literally hundreds of university students, most do not know. Why should they? They have no background, the same as me when I was their age. So, let us set a path of study that will allow students to have the framework to pursue any career choice. As a Professor Emeritus, over the years I have modified my recommendations to students. For a university education, follow a very simple process: get a degree in sciences or business, preferably both. If you follow the vocational route, rather than university, the same advice applies. With this foundation, add art, history, religion or whatever your passion. ‘Surely, you cannot believe that is applicable to everyone?’ Oh yes, I do. The success of students has proven it.
4. We ever so gently encouraged our progeny. One is a PhD in Engineering Management, one is a Veterinary Doctor, one is a chemical engineer, and one is a marketing and business owner. Can you tell me which were boys and girls? We did not play that game with careers.
5. I took my own advice. My undergraduate was engineering, my Masters was business, then my first PhD was engineering. My careers crossed industry, academia, and research scientist with multiple business ownerships. Adding to that was a second PhD in theology. We write a history newspaper column and books. My advice and counsel is based on life-experience, education, and training. Get the science and business education, with moral ethics, then you have the building blocks to do anything you want, from creativity and art to helping others.
6. With multiple grandchildren, it is time I transferred some of what I have seen and experienced over many decades so they can have a modicum of the life experiences we have seen, if they want it. We are talking about foundations. The same foundations apply to everyone in our society.
7. Maker is a word associated with STEM. It describes people who make things. We used to call them engineers and techs, but because of mis-perceptions those are limiting terms. I can accept that, since sciences are a foundation, not an end to itself.
8. In the last half of my university career as a Professor, I required all my students to obtain their ham (amateur radio) license. Why? Most of them did not use it to talk on the radio. Ham is the one, single-best tool and avocation to link all science and technology pursuits together. Genteel ethics are embedded in the culture and training.
9. STEM is at home with Hams. Many people think Ham is about radios. That was in grandpa’s day. Technology that hams get to use, no one else can touch. Whatever the technology, hams add range and distance to the process and project. A ham is often a maker, but as likely with a keyboard as a soldering iron.
10. Ham has been called wireless since the first days of Marconi. Yes, the same wireless that now connects everything.
11. To hams, infrastructure is optional. Ham = technology at a distance. *Ham = technology and communications when nothing else works.*
12. Why am I passionate about Ham? It is the link for all technology.
13. The world has changed. Our church asked a couple of us to develop training, introduce ham concepts, and help people become licensed. This is the forward thinking of a pastoral staff, who at the time were not hams themselves. They wanted an outreach for youth career encouragement, senior activities and interaction, with mental and manual stimulation for all groups. In our area, we want people who could communicate in an emergency of any kind. It is something families can do together.
14. What have we seen? The oldest to earn a license is an 82-year-old great-grandparent, who has earned a Technician, General, and the most advanced Extra class license. The youngest is 14. About thirty-percent of the participants are ladies. People who thought they were not technical, as well as engineers, have earned their ticket. Son-in-law helping mother-in-law with her ham technology is cool beyond description. We have helped blind and autistic to earn their license. We are integrating computers with long distance communication operations. Can you show us any other activity, anywhere, which has the diversity of this stellar group of people going about this thing called life?
15. Get involved yourself and with your children. It will change their future. Come, develop a camaraderie, appreciate STEM, be a maker, be a Ham.
16. Life is good. Enjoy.

