

# Engineering as a Christian Vocation

Fall 2024

# Introduction

## Faith and Vocation as Practitioners of Engineering, Computer Science, and Technology

*“Whether you are a student or a seasoned professional, many Christians working in technical areas struggle with engaging their faith in the world of technology. Perhaps you never thought about how your faith might inform your work in technology. Perhaps you feel a disconnect between your daily professional life and your Christian spiritual walk. The development of technology through science and engineering has always been a cultural activity with religious implications, but its direction is set by the human heart. Developing and using technology is one way we love God and our neighbor, and more fully witness to the gospel of Jesus Christ for the entire world.”*

From *A Christian Field Guide to Technology for Engineers and Designers* by Ethan Brue, Derek Schuurman, and Steven Vanderleest

The primary question driving this discussion group is, *What is the role of a Christian in a technological vocation?* Modernity seems to be telling us that science, technology, and engineering are somehow opposed to faith. Furthermore, to many, the influence of technology and “science” are the primary reasons for abandoning their faith. However, many feel called to engage with technology, not simply as an end user, but a creator, practitioner, designer, and engineer.

# Schedule Overview

## Week 1

### Subject: The Technological Frame

*“Therefore everyone who hears these words of mine and puts them into practice is like a wise man who built his house on the rock. The rain came down, the streams rose, and the winds blew and beat against that house; yet it did not fall, because it had its foundation on the rock. But everyone who hears these words of mine and does not put them into practice is like a foolish man who built his house on sand. The rain came down, the streams rose, and the winds blew and beat against that house, and it fell with a great crash.” Matthew 7:24-27*

Can we build our understanding of the technological vocation on rock?

### Readings

- *What Frames What?* by Richard Horner *Reconsiderations* Vol 4, #5 October 2005
- *Five Things We Need to Know About Technological Change* by Neil Postman, Lecture Given in March 1998

## Week 2

### Subject: A Secular Framing of Ethical Technology

*“Do not love the world or anything in the world. If anyone loves the world, love for the Father is not in them. For everything in the world—the lust of the flesh, the lust of the eyes, and the pride of life—comes not from the Father but from the world. The world and its desires pass away, but whoever does the will of God lives forever.” 1 John 2:15-17*

### Readings

- *Ethics in the Age of Disruptive Technology, Appendix 1/2 - Examples of Technology Ethics and Responsible Technology Practices & ITEC Principles and How to Use Them: Anchoring, Guiding, Specifying, Action* by Intstitute for Technology, Ethics, and Culture
- *Ethics in Technology Practice* by Shannon Vallorm, Iring Raicu, and Brian Green. The Markkula Center for Applied Ethics at Santa Clara University
- *Code of Ethics for Engineers* National Society of Professional Engineers

## Week 3

### Subject: A Christian Framing of Ethical Technology

*“Do not conform to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God’s will is—his good, pleasing and perfect will.” Romans 12:2*

*“Your hands made me and formed me; give me understanding to learn your commands.” Psalm 119:73*

## Readings

- *The Computer Scientist as Toolsmith II* by Fred Brooks, Communications with the ACM, March 1996
- *A Christian Field Guide to Technology for Engineers and Designers*, Chapters 5 & 6, by Ethan Brue, Derek Schuurman, and Steven Vanderleest

## Week 4

### Subject: Putting it Into Practice

*“Whatever you do, work at it with all your heart, as working for the Lord, not for human masters, since you know that you will receive an inheritance from the Lord as a reward. It is the Lord Christ you are serving.” Colossians 3:23-24*

## Readings

- *A Christian Field Guide to Technology for Engineers and Designers*, Chapter 9, by Ethan Brue, Derek Schuurman, and Steven Vanderleest

## **Week 1**

**Readings**

**Discussion Topics**