# Rigid-Flex Full-Stack Training Plan (4 Weeks)

## Week 1 – Foundation & Schematic Creation

| Day | Task |
|---|---|
| 1 | Install KiCad + FreeCAD/SolidWorks; create GitHub repo |
| 2 | Study IPC-2223E (Ch.1–3) and summarize key rules |
| 3 | Draw schematic: connector–MCU–connector |
| 4 | Annotate nets and assign footprints |
| 5 | Generate schematic PDF and commit to GitHub |
| 6 | Review vendor sheet: min trace/space, bend radius |
| 7 | Document summary notes |

## Week 2 – Rigid-Flex Layout & Stack-Up

| Day | Task |
|---|---|
| 1 | Import netlist, draw outline (Edge.Cuts) |
| 2 | Define rigid/flex zones and bends |
| 3 | Assign stack-up: FR-4 vs Polyimide |
| 4 | Place components, route critical signals |
| 5 | Run DRC/DFM check |
| 6 | Generate fab drawing and commit results |
| 7 | Prepare summary table for vendor rules |

## Week 3 – Mechanical Integration

| Day | Task |
|---|---|
| 1 | Export STEP & IDF (.emn/.emp) files |
| 2 | Import into FreeCAD or SolidWorks |
| 3 | Assign materials and verify bends |
| 4 | Check fit with connectors/enclosure |
| 5 | Export mechanical drawing (DXF/PDF) |
| 6 | Save and version control results |
| 7 | Create local fabrication notes |

## Week 4 – Documentation & Ordering

| Day | Task |
|---|---|
| 1 | Generate Gerbers + Drill files |

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|---|---|
| 2 | Write README with stack-up & bending info |
| 3 | Vendor DFM check via JLCPCB/PCBWay |
| 4 | Capture 3D renders and screenshots |
| 5 | Create slides and PDF presentation |
| 6 | Archive all outputs and tag release |
| 7 | Prepare for fabrication order submission |