# EE 434 vs. EE 466

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# Comparison

| | EE 434 | EE 466 |
|---|---|---|
| Title | ASIC and Digital Systems Design | VLSI Design |
| Offered | Spring | Fall |
| Credits | 3 | 3 |
| Prerequisites | EE 234, EE 321 | EE 234 |
| Instructor | Dae Hyun Kim | Dae Hyun Kim |

# Contents

| Contents | EE 434 | EE 466 |
|---|---|---|
| Transistor (TR) operations | O | O |
| TR-level logic design, analysis | O | O |
| TR sizing | O | O |
| Basic sequential logic (latches, flip-flops) | O | O |
| Electrical analysis (steady-state (DC), switching, power) | O | O |
| Advanced circuit design techniques (dynamic CMOS, domino, ...) | X | O |
| Advanced circuit design (sequential logic) | X | O |
| Memory | X | O |
| Arithmetic units (adders, multipliers, ...) | X | O |
| Physical design (layout) and analysis | O | X |
| Interconnect analysis | O | X |
| Timing analysis, static timing analysis | O | X |
| VHDL | O | X |
| Testing | O | X |