Hardware

What if I cannot get parts at the bookstore?

(The bookstore is no longer used for parts kits, but this information is still relevant.)

You can find the protoboard (breadboard), wire kit, and TTL-compatible parts at electronic retailers. Eta Kappa Nu, the ECE honor society, usually sells these items, and information is forwarded to students as soon as it is available. By mail order, you can try www.jameco.com and www.digikey.com or others. All parts must be DIP packages (i.e., not SOIC or other surface mount variations). Following are some part numbers. These are subject to change and provided only as a courtesy to students, so check before you order. There may be other equivalent parts at the same vendors, if these are not in stock. These vendors will ship overnight.

If you have a kit from another class and wish to reuse it, compare it with the list below. In particular, the ECE2020 kit is missing the 4-input NAND gate, the 74xxx20. (See the reading for Lab 2 to understand more about HCT/LS distinctions.)

Part Protoboard Wire Kit	Jameco 20791 19290	Digikey 922318-ND 923351-ND	Fry'st or Allied‡ 4612358† 4612408 † (wires) 3849287 † (both board and wires)
74HCT00N or CD74HCT00E	44871	568-1499-5-ND 296-1603-5-ND 296-2081-5-ND	236-1711 ‡
74HCT02N, 74ACT02PC or CD74HCT02E	211967	296-8380-5-ND 568-1501-5-ND	236-1715 ‡
74HCT04N or CD74HCT04E	44898	MM74HCT04N-ND 568-1503-5-ND 296-2083-5-ND	236-1719 ‡
74HCT20N CD74HCT20E or 74HCT20DB	45583* 47095**	568-4583-5-ND 296-2135-5-ND	236-1769 ‡
74HCT27N, 74ACT27PC or CD74HCT27E	47378**	296-14890-5-ND	236-0235 ‡
74HCT74N, 74ACT74PC or CD74HCT74E * HC part, not HCT. Datasheets harder to interpret, since it is specified for several voltage levels, and is only nominally TTL-compatible when powered at +5V. But acceptable for lab.	45137 212011	296-1625-5-ND	236-1870 ‡

^{**} LS part. Acceptable, again if you use the correct datasheet. (And probably what you get in a kit from the bookstore.)

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† Fry's is in Metro area(Gwinett Place and North Fulton)

‡ Allied Electronics: www.alliedelec.com

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