

UW-Microfabrication Facility Equipment Charges and Fees

09/14/11

Equipment Hourly Rates

Tool	Industry Rate	Academic Rate
Photolithography : Coat : CEE1	\$ 150.00	\$ 52.50
Photolithography : Coat : CEE2	\$ 150.00	\$ 52.50
Photolithography : Coat : Headway	\$ 150.00	\$ 52.50
Photolithography : Expose : EVG-Aligner	\$ 210.00	\$ 73.50
Photolithography : Expose : ABM-Aligner	\$ 180.00	\$ 63.00
Photolithography : Expose : 3in-Quintel	\$ 150.00	\$ 52.50
Photolithography : Expose : Flood-Expose	\$ 50.00	\$ 17.50
Photolithography : Develop : Spin-Dev	\$ 85.00	\$ 29.75
Photolithography : Ovens/Hotplates : HMDS	\$ 75.00	\$ 26.25
Nanolithography : Ebeam-Lithography	\$ 450.00	\$ 125.00 (Note 1)
Nanolithography : DipPen	\$ 215.00	\$ 75.25
Nanolithography : Nanoimprint	\$ 215.00	\$ 75.25
CVD/Furnaces : CVD : PECVD	\$ 275.00	\$ 96.25
CVD/Furnaces : CVD : LPCVD-Nitride	\$ 120.00	\$ 42.00
CVD/Furnaces : CVD : LPCVD-LTO	\$ 275.00	\$ 96.25
CVD/Furnaces : Furnace Tubes : AtmTube2	\$ 120.00	\$ 42.00
CVD/Furnaces : Furnace Tubes : AtmTube3	\$ 120.00	\$ 42.00
CVD/Furnaces : Furnace Tubes : AtmTube1	\$ 120.00	\$ 42.00
CVD/Furnaces : Furnace Tubes : AtmTube4	\$ 120.00	\$ 42.00
CVD/Furnaces : Furnace Tubes : CNT-Reactor	\$ 215.00	\$ 75.25
CVD/Furnaces : Rapid Thermal Annealing : RTA-Clean	\$ 250.00	\$ 87.50
CVD/Furnaces : Rapid Thermal Annealing : RTA-General	\$ 250.00	\$ 87.50
Metallization : Evaporation : Ebeam-Clean	\$ 180.00	\$ 63.00 (Note 2)
Metallization : Evaporation : Ebeam-Liftoff	\$ 150.00	\$ 52.50 (Note 2)
Metallization : Sputtering : Sputter-Lesker	\$ 250.00	\$ 87.50
Metallization : Sputtering : Sputter-Oxford	\$ 215.00	\$ 75.25
Metallization : Electroplating : CopperBath	\$ 120.00	\$ 42.00
Metallization : Electroplating : GoldBath	\$ 240.00	\$ 84.00
Dry Etching : DRIE	\$ 300.00	\$ 105.00
Dry Etching : Tegal	\$ 180.00	\$ 63.00
Dry Etching : Trion	\$ 180.00	\$ 63.00
Dry Etching : BarrelEtch	\$ 150.00	\$ 52.50
Dry Etching : ICP-Fluorine	\$ 275.00	\$ 96.25
Dry Etching : ICP-Chlorine	\$ 275.00	\$ 96.25
Dry Etching : Vision-RIE	\$ 300.00	\$ 105.00
Metrology : Profilometry : P15	\$ 150.00	\$ 52.50
Metrology : Profilometry : Wyko	\$ 150.00	\$ 52.50
Metrology : Microscopes : Leica	\$ 60.00	\$ 21.00
Metrology : JEOL-SEM	\$ 215.00	\$ 75.25
Misc : Wafer Bonding : EVG-Bonder	\$ 215.00	\$ 75.25
Misc : Back-End : KS-Saw	\$ 180.00	\$ 63.00
Misc : Back-End : Tempress-Saw	\$ 150.00	\$ 52.50
Misc : Back-End : CO2-Laser	\$ 85.00	\$ 29.75
Misc : Back-End : WireBond	\$ 120.00	\$ 42.00
Misc : Printing : ScreenPrinter	\$ 70.00	\$ 24.50

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Other Fees and Charges

Key card fee, \$100/month. For all users who have an enabled keycard.

Cleanroom Access Fee: \$50/day/user, for each day there is an entry into the cleanroom. Cleanroom access is hard capped at **\$600/month/user** for industrial users, **\$200/month/user** for academic users (you are not charged more than this amount for cleanroom access in any month.)

Staff time is billed at **\$100/hour** for actual staff time spent working on your project, either as remote processing (no user present), or in lieu of training (ie. Having staff run a tool for you rather than you getting trained.

Precious Metal Surcharge: Use of some materials, for example, Gold, Silver, and Platinum, are charged based on actual mass used. The rates are variable depending on latest purchase prices, and are posted at the individual tools.

Supplies. The lab keeps a small inventory of some common supplies, such as cleanroom notebooks, tweezers, and some wafers and sample carriers. You will be re-charged for these items, at a small markup over purchase price to cover tax and overhead.

Equipment Charge Caps: There is a "soft cap" for most equipment use of **\$3600/month/user** for industrial users, and **\$1250/month/user** for academic users. Equipment usage is charged at **15% of the above rates** after the soft cap is reached in any month.

Term and Conditions: The "Facility Use Agreement" is the prevailing legal agreement, with payment terms described in that document. As described in that document, fee changes in excess of 10% will be made only after 90 days notice.

Note 1: Ebeam Lithography time is not subject to the capped rate structure. All ebeam time used is billed.

Note 2: Some materials, including Au and Pt, are subject to a precious metals surcharge, as described above. Details posted at each machine.