

FRANKLIN HIGH SCHOOL

Xovtooj: (916) 714-8150

www.egusd.net/franklinhs

Green Renewable Energy Engineering Network Academy (GREEN)

GREEN yog ib txoj kev kawm tshiab uas qhia cov menyuam kawm ntawv txog cov kev tshawb nrhiav txog tej yam khoom uas rov muab los siv tau dua (renewable sources of energy) hauv cov hoob kawm engineering thiab core academic. Cov hoob kawm GREEN Academy yog qhia kom paub txog tej uas muaj hauv txoj kev kawm thiab paub txog tej yam uas nyob puagncig yus, tib lub sijhawm uas lawm kawm txog cov teebmeem ntawm tej dej, fuabcua thiab khoom siv (ecological issues). Cov menyuam yuav muaj kev kawm los ntawm cov local engineering thiab cov koomhaum saib dej, huabcua thiab khoom siv (environmental firms) uas yog muaj tibneeg tuaj hais lus rau lawv hauv hoob, coj lawv mus saib cov chaw ntawd, thiab kev mus ua haujlwm pab hauv tej zejzoz. Txhua yam uas lawv kawm thiab ua hauv cov hoob no yuav pab tau rau lawv txoj kev npaj mus kawm cov hoob qebsiab hauv college lossis university lossis lwm yam kev kawm hauv qebsiab.

Huv txuj kev kawm peb lub xyoos uake nuav, cov mivnyuas yuav muaj kev paab coj hab qha lwm tug (mentorship) hab kev moog xyum ua (internship) huv cov tsev laagluam huv tej zejzoz. Yuav siv cov kev kawm qebsab nuav lug tsim ib cov kev kawm hab yuav tau txais credits rua kev moog kawm cov colleges hab universities huv tej zejzoz.

Cov mivnyuas kws kawm txuj kev kawm nuav yuavtsum tau kawm kuas taag cov hoob kws has huv txuj Career Technical Education Courses le huv qaab nuav nrug rua cov kev kawm luj kws puab yuav tau kawm (xwsle, Aaskiv, lej, science, social science, etc.) nrug uake (as one cohort).

Cov Hoob GREEN Academy Uas Yuavtsum Tau Kawm

Industry Sector: Engineering and Architecture

Pathway: Engineering Design

Grade	Academic 1	Academic 2	Academic 3	CTE	Advocacy
9	N/A	N/A	N/A	Computer Tech General Business	Yes
10	English 10	Biology	World History	CADD	Yes
11	English 11	Chemistry	US History	Engineering A	Yes
12	English 12			Engineering B or Advanced CADD and Marketing	Yes

FRANKLIN HIGH SCHOOL

**Green Renewable Energy Engineering Network (GREEN) Academy
(txuas ntxiv)**

Cov hoob CTE uas yuavtsum tau kawm rau txoj kev kawm no teev rua hauv qab no.

Hoob Kawm	Leejtwg thiaj kawm tau hoob no	Credits	Kev Qhia Txog
GREEN Computer Technology Course #12111	Freshman	5	<p>Hoob no yog kawm txog computer technologies thiab siv los pab kom muaj kev kawm nceqib. Cov menyuum kawm ntawv yuav los kawm txog kev siv daim keyboard, kev sau ntawv, cov kev siv computer, spreadsheets, database, kev siv technologies los nrhiav ntaub ntawv hauv library, thiab kev tuaj deb nrog lwm tus sib txuas lus. Cov menyuum kawm ntawv yuav siv tej uas lawv kawm tau hauv hoob no los ua lawv cov ntawv (assignments) hauv lwm hoob uas kawv kawm rau xyoo ntawd, uas siv computer mus nrhiav kev qhia, npaj lawv cov ntawv, daws teebmeem, thiab ceev kev qhia. Hoob no suav tau ua ib hoob Technology hauv kev kawm kom tiav.</p> <p>Cov ntaub ntawv uas siv: <i>Century 21 Computer Applications & Keyboarding, South Western</i></p>
GREEN Computer Aided Design/Drafting (CADD) Course #12100	Sophomore	10	<p>Hoob no yog tsim los ua hoob qhia pib rau txhua lwm hoob CADD. Lub homphiaj yog los qhia kom paub txog kev siv computer los pab tsim qauv/kos qauv, rau cov uas paub mentsis lossis tsis tau paub siv CADD dua li, uas yog siv Auto CADD software. Cov menyuum kawm ntawv yuav los kawm txog computer hardware thiab kev tsim program thiab cov khoom siv los tsim. Yuav muaj cov kev qhia thiab kev ua uas hais txog tej yam tseemceeb xwsli xim, qhov siab thiab dav, cov ua txheej (layers), thiab cov ua thooj (blocks). Kev ua cov projects xwsli tsim ib qhov qauv (vise) kom paub txog thiab xyaum tau ntau lub tswyvim txog kev kos duab Lub hoob yuav xyaum txhua yam kev kos duab, tsis hais kev kwvyees kos lossis kev ntsuas mam kos. Hoob no suav tau ua 10 credits of rau kev kawm lej. Cov menyuum kawm ntawv yuavtsum xeem kom dhau 10 credits thiaj suav tau ua kev Paub Technology hauv Kev Kawm Kom Tiav.</p> <p>Cov ntaub ntawv uas siv: <i>Applying Auto-Cad, Glencoe</i></p>
GREEN Engineering A Course #12340	Junior	10	<p>Hoob no tsim rau cov tub/ntxhais hluas uas xav koom tes xyaum tej haujlwm muaj nyob rau chaw tsim tus qauv ua tshuab, ua vaj tse, ua kev, nrog rau lwm yam (engineering fields). Lub sijhawm no, nws thiaj paub txog kev kawm ntawv qeb siab los ua ib tug engineer, cov txuj ci los yog kev txawj uas yuav tsum muaj, nrog rau lub luag haujlwm thiab tej num uas cov kws engineers yuav tau saibxyuas. Txuas ntxiv, cov tub/ntxhais hluas yuav tau ua tej projects uas tsis yooj yim thiab lom zem, los pab nws kawm txog Newton's Laws of Motion (txoj kev cai ua zog), lub hauv paus ntawm engineering. Lwm yam projects txuas rau kev daws teeb meem muaj xws li kho tshuab hlau (mechanical engineering), yam uas siv hluav taws xob (electronic engineering), yam tsa/teeb (structural engineering), nrog rau hluav taws xob (electrical engineering). Cov tub/ntxhais hluas yuav tsum xav txog txoj kev tsim tus qauv, pib lub hauv paus mus rau lub ntsis, thaum nws pib tsim tus qauv, kho/pauv, ua kom tau tus qauv, thiab thaum sim tus qauv saib nws puas tau zoo txaus raws li tus qauv ntsuam.</p> <p>Cov ntaub ntawv uas siv: Tsis muaj.</p>

FRANKLIN HIGH SCHOOL

School of Technology, Engineering and Media (STEM)

STEM yog ib txoj kev kawm tshwjxeeb uas cov menyuam yuav los kawm tau ib yam ntawm plaub yam kev kawm: Computer Specialist, Engineering Specialist, Media Specialist lossis Generalist. Tomqab uas kawm tag cov hoob loj lawm, cov mivnyuas yuav los xaiv ib yam los kawm kom lawv paub thiab txawj tas tas li (mastery coursework). Txhua yam kev kawm tshwjxeeb no yuav pab tau kom cov menyuam npaj txhij mus rau kev yuav mus kawm ua haujlwm lossis yuav mus kawm cov hoob qebsiab hauv college lossis university. Txhua yam kev kawm yuav muaj kev koomtes thiab nrog saib los ntawm cov tsev laglaum hauv tej zejzoz. Muaj kev qhia ntxawg txog tej yam kev kawm nyob rau hauv qab no:

Cov Hoob STEM Academy Uas Yuavtsum Tau Kawm

Computer Specialist

Hoob Computer Specialist siv ib tus qauv/kev kawm txawj uas cia cov menyuam yau kawm ceev thiab moog deb lawv li lawv yuav kawm tau txog yam ntawd. Yuav siv cov kev qhia hauv on-line thiab hauv lub hoob (module-based) los qhia cov menyuam. Thaum kawm dhau, lawv yuav tau txais ib lossis ntau daim ntawv ua povthawj tias kawm txawj lawm (industry certification

Industry Sector: Information & Communication Technologies

Pathway: Network Communications, Programing and Systems Development

Grade	Academic 1	Academic 2	Academic 3	CTE	Advisory
9	N/A	N/A	N/A	Computer Technology THIAB Intermediate Computers	Yes
10	Biology	World History	English 10	Computer Networking Basics, LAN	Yes
11	Chemistry	U.S. History	English 11	Web Design and Development	Yes
12	Physics			Adv. Computers/Computer Related ROP	Yes

Cov hoob CTE uas yuavtsum tau kawm rau txoj kev kawm no teev rau hauv qab no.

FRANKLIN HIGH SCHOOL

School of Technology, Engineering and Media (STEM) (txuas ntxiv)

Engineering Specialist

Cov menyuam uas xaiv yam kev kawm Engineering Specialist yuav mus kawm cov hoob uas yog Computer Assisted Drafting thiab Engineering. Cov hoob kawm Engineering muaj xws li hoob Electrical Systems, Robotics, Pneumatics, Structural Engineering, Mechanical Systems, Machining thiab Manufacturing, Environmental Systems thiab Aerospace Systems.

Industry Sector: Engineering and Architecture

Pathway: Engineering Design

Grade	Academic 1	Academic 2	Academic 3	CTE	Advisory
9	N/A	N/A	N/A	Computer Technology AND Intermediate Computers	Yes
10	Biology	World History	English 10	Computer Aided Drafting and Design (CADD)	Yes
11	Chemistry	U.S. History	English 11	Engineering A	Yes
12	Physics			Advanced CADD and Engineering B	Yes

Media Specialist

Hoob Media Specialist yog tsim los qhia npaj cov menyuam rau kev mus kawm haujlwm rau phab media communications uas yog tus thajj lossis tus raug thajj duab. Yuav kawm ntau txog Digital Video Production, Television Studio Production thiab Multimedia Design. Lub Franklin High School lub television studio yuav muab sijhawm rau cov menyuam los ua ntau yam uas yog siv cov video technology thaum lawv los kawm txog kev ua television production los ntau kev tsim cov xovxwm uas hais tawm (digital news broadcasts), cov projects hauv tsev kawm ntau, thiab thajj txog tej zaj lossis tej tus tibneeg (portfolio products).

Industry Sector: Arts, Media, and Entertainment

Pathway: Media and Design Art

Grade	Academic 1	Academic 2	Academic 3	CTE	Advisory
9	N/A	N/A	N/A	Computer Technology THIAB Intermediate Computers	Yes
10	Biology	World History	English 10	Video 1	Yes
11	Chemistry	U.S. History	English 11	Video 2	Yes
12	Physics			Television Occupations I & II	Yes

FRANKLIN HIGH SCHOOL

School of Technology, Engineering and Media (STEM) (continued)

Generalist

Cov menyuam uas nyiam peb yam kev kawm hauv STEM xaiv tau mus kawm hoob Generalist. Lawv yuav mus kawm txog peb yam kev kawm.

Cov hoob CTE kws yuavtsum tau kawm rau txoj kev kawm no teev rau hauv qab no..

Hoob Kawm	Leejtwg thiaj kawm tau hoob no	Credits	Kev Qhia Txog
<p>STEM Audio Production 1</p> <p>Franklin High</p> <p>Course #12156</p>	<p>Sophomore Junior Senior</p>	<p>10</p>	<p>Hoob no tsim los qhia thiab npaj cov tub ntxhais rau cov haujlwm uas siv lossis kaw suab (audio). Yuav kawm thiab ua tau li no los ntawm kev kawm cov qauv rau signals, kaw suab rau cov track, MIDI Programming, thiab digital audio workstations. Nws yuav pib qhia txog cov tswvyim thiab kev xyaum rau cov suab nyob rau xovtooj cua. Cov tub ntxhais yuav nyeem ib cov ntawv xovxwm sau los ntawm cov neeg txwj ntse, lawv yuav kawm kom paub txog cov qauv rau kev tsim kev kaw suab los ntawm tej khoom uas siv los kaw, thiab lawv yuav tsum tau ua li npaj nyob rau cov lab activities uas siv cov lagluam cov software cov qauv. Cov tub ntxhais kawm yuav tau qhabnees rau pem Cosumnes River College credit for RTVF 319.</p> <p><i>Qhov uas yuav tsum tau kawm uantej: Tsi muaj.</i></p> <p>Cov ntaub ntawv uas siv : Tsi muaj muab rau lawv</p>
<p>STEM Computer Aided Design/Drafting (CADD)</p> <p>Course #12100</p>	<p>Sophomore</p>	<p>10</p>	<p>Hoob no yog lub hauv paus ntawm tag nrho cov hoob qhia CAD. Yam tsom txog yog kev siv lub computer los tsim tus qauv kom zoo nkauj (computer-aided design/drafting skills), qhia rau cov tub ntxhais hluas uas tsis tau paub txog CADD los yog paub me me xwb, thiab yuav siv Auto CADD software. Yuav qhia cov tub ntxhais hais txog cov computer hardware thiab tej yam program tshiaib niam qhuav tsim tau nrog rau cov khoom tuaj nrog nws. Kev tham lus thiab xyaum hauv hoob yuav qhia txog ntau hom xim, kev dav thiab loj, tej txheej thiab khoom thaiv. Yuav muaj ua projects los pab tus tub kawm thiab xyaum ntau yam kev kos duab/teeb duab. Hoob no yuav tau siv txhua yam txuj ci thiab kev txawj ntse los npaj thiab tsim duab, saibxyuas qho me qho loj mus rau lub homphiaj npaj ua. Cov tub ntxhais yuav tsum kawm kom tau 10 credits nws thiaj cuag tau kev lav ntawv raws li Technology Proficiency Graduation Requirement.</p> <p>Cov ntaub ntawv uas siv: <i>Applying Auto-Cad, Glencoe</i></p>
<p>STEM Computer Technology</p> <p>Course #12111</p>	<p>Freshman</p>	<p>5</p>	<p>Hoob no yog kawm txog computer technologies thiab siv los pab kom muaj kev kawm nceqib. Cov menyuam kawm ntawv yuav los kawm txog kev siv daim keyboard, kev sau ntawv, cov kev siv computer, spreadsheets, database, kev siv technologies los nrhiav ntaub ntawv hauv library, thiab kev tuaj deb nrog lwm tus sib txuas lus. Cov menyuam kawm ntawv yuav siv tej uas lawv kawm tau hauv hoob no los ua lawv cov ntawv (assignments) hauv lwm hoob uas kawv kawm rau xyoo ntawd, uas siv computer mus nrhiav kev qhia, npaj lawv cov ntawv, daws teebmeem, thiab ceev kev qhia. Hoob no suav tau ua ib hoob Technology hauv kev kawm kom tiav.</p> <p>Cov ntaub ntawv uas siv: <i>Century 21 Computer Applications & Keyboarding, South Western</i></p>

FRANKLIN HIGH SCHOOL

School of Technology, Engineering and Media (STEM) (txuas ntxiv)

Hoob Kawm	Leejtwg thiaj kawm tau hoob no	Credits	Kev Qhia Txog
STEM Computers, Intermediate Course #12131	Freshman	5	<p>Hoob no muab sijhawm ntxiv rau cov menyuum kawm ntawv los xyaum siv computer. Cov menyuum kawm ntawv yuav kawm txog kev sau program, kev siv kev sau ntawv qibsiab, kev luam ntawv (publishing) uas suav multimedia thiab lwm yam.</p> <p><i>Yam yuav tsum tau kawm uantej hoob no: Kawm hoob Computer Technology thiab tau qhab nee tus C.</i></p> <p>Cov ntaub ntawv uas siv: <i>Microcomputer Applications for Business, South Western</i></p>
STEM Computer Networking Basics (LAN) Course #12134	Sophomore	10	<p>Hoob no qhia txog tej yam tob heev ntawm kev cab hlua xov (wiring), txoj hauv kev yuav ua mus (protocols), kev saibxyuas haujlwm (management) thiab kev sib txuas (configuration) ntawm cov Local Area Networks (LAN). Thaum kawm tiav, cov tub ntxhais hluas yuav tsum paub txog txhua yam ntawm kev teeb tsa thiab saibxyuas cov LAN routers, pauv cov hubs, servers thiab workstations. Lawv yuav tsum nkag siab txog lub computer operating systems (Windows los yog Mac) thiab paub txog tej yam yooj yim ntawm kev siv Internet ua ntej yuav kawm hoob no.</p> <p><i>Hoob yuav tsum tau kawm ua ntej: Computer Technology.</i></p> <p>Cov nNtaub ntawv uas siv: Tsis muaj.</p>
STEM Exploring Computer Science Course #16108	Sophomore Junior Senior	10	<p>Hoob no qhia txog kev siv lub laj lim tswv yim los tsim ib yam dab tsi, kev koom tes ua, kev tswj kev cai, thiab daws teeb meem txuas nrog kev siv computer ntaus ntawv (computing). Nrog rau kev kawm no, cov tub ntxhais hluas yuav tau tsim thiab tham txog cov teeb meem ntaus ntawv uas muaj tiag tiag, thiab tham txog kev sib fim lwm tus thiab ua haujlwm kom ncaj ncees. Yuav muaj koom tes ua ob peb hom projects uas dav thiab tob heev, ua kom tau raws li tej yam tiag nyob rau kev ntaus computing.</p> <p>Hoob yuav tsum tau kawm ua ntej: Computer Technology</p> <p>Cov ntaub ntawv uas siv: Tsis muaj.</p>
STEM Computer Technology Service Repair Course #16700	Seniors	1 0	<p>Hoob no yog muaj los npaj cov menyuum kawm ntawv rau ntau yam haujlwm uas yog theem pib hauv computer technology. Cov menyuum kawm ntawv uas kawm tas yuav pab los tsim, kho, upgrade thiab install computers. Daws teebmeem (troubleshooting), thiab txuas network installation techniques. Nws yuav yog ib yam zoo rau cov menyuum kawm ntawv uas xav mus kawm college thiab/lossis tsev kawm haujlwm. Cov menyuum kawm ntawv yuav paub txog tej uas siv tau rau IBM PC thiab Macintosh platforms.</p> <p>Cov ntaub ntawv uas siv: Tsis siv phau ntawv</p>

FRANKLIN HIGH SCHOOL

School of Technology, Engineering and Media (STEM) (txuas ntxiv)

Hoob Kawm	Leejtwg thiaj kawm tau hoob no	Credits	Kev Qhia Txog
STEM Construction Technology Course #16250	Junior Senior	10	<p>Cov tub ntxhais hluas hauv hoob yuav tau kawm lub program uas qhia txuj ci npaj yuav mus nrhiav haujlwm ua, tshawb txog ntau hom haujlwm, thiab txuj ci siv rau kev puab tsev (building trades) thiab cov haujlwm kho vaj tse uas tsom txog kev txuag fais fab/txuag khoom siv (green focus). Yuav tau xyaum pua ntaub vov tsev, siv tej pas ntsuas khoom, kawm siv cov twj hlau uas siv faib fab, nyeem daim qauv duab, npaj thaj av, siv xuab zeb ua, txuas ntoo, vov ruv tsev, kho sab hauv tsev thiab sab nraum tsev kom tiav, kho phab ntsa, kho tej yam khoom qub kom rov tshiab, paub txog kev xyuam xim thiab kev pab first-aid procedures.</p> <p><u>Cov ntaub ntawv uas siv:</u> Tsis muaj.</p>
STEM Video Production I Course#12152	Sophomore	10	<p>Hoob kawm no muaj cev tes ua num, yuav pib qhia cov tub ntxhais hluas txog txoj kev siv koob thaj/yees duab video thiab lwm yam khoom siv los thaj video nyob rau hoob classroom thiab ntawm chaw yeas duab/ua video (studio). Yuav tau siv ntau lub computer los khiav tej software uas tsis tas kho/edit li, pab tsim ob peb hom video rau hoob classroom thiab rau kev tshaj tawm xovxwm hauv tsev kawm ntawv. Cov txuj ci qhia muaj xws li kev sau daim ntawv tham lus, zaj dab neeg, kev siv lub koob thaj duab, tso suab, taws teeb, kho kom zoo dua qho qub, yeas tej yeeb yaj kiab uas luv luv, xovxwm qhia txog lagluam, tshab xovxwm rau sawvdaws thiab ua txhua hom haujlwm nyob rau pawg video production team.</p> <p><i>Hoob yuav tsum tau kawm ua ntej: Computer Technology thiab Multimedia los yog muaj kev pom zoo los ntawm tus xibfwb.</i></p> <p><u>Cov ntaub ntawv uas siv:</u> <i>Digital Video: Production Cookbook</i>, O'Reilly Media, Inc.</p>
STEM Video Production II Course#12153	Junior Senior	10	<p>Hoob no yuav txhawb cov txuj ci tau kawm tas los no hauv Video I. Qho tseem ceeb yog npaj thiab tsim kom tau cov projects nyuaj mes ntsis (intermediate) rau ntau hom kev yeas duab thiab television (txog dabtsi thiab leej twg). Cov tub ntxhais hluas tej txuj ci mam zoo zuj zus mus nrog rau kev paub lub luag haujlwm ntawm kev ua ib tug coj saibxyuas txhua yam hauv kev tsim yeeb yaj kiab. Cov txuj ci muaj xws li kev sau zaj dab neeg, sau cov lus hais, npaj/teeb tsa, qhia kev, taws teeb, nthuav tawm thiab kho/editing. Projects muaj xws li pre-thiab post production hais txog tsev kawm ntawv cov xovxwm, tsis tas li ntawd los tej zaum yuav tau ua ib cov special projects uas yuav raug tshaj tawm hauv tsev kawm ntawv los yog rau hauv public television.</p> <p><i>Hoob yuav tsum tau kawm ua ntej: Video Production I.</i></p> <p><u>Cov ntaub ntawv uas siv:</u> Tsis muaj.</p>

FRANKLIN HIGH SCHOOL

School of Technology, Engineering and Media (STEM) (txuas ntxiv)

Hoob Kawm	Leejtwg thiaj kawm tau hoob no	Credits	Kev Qhia Txog
STEM Web Design and Development Course #12138	Junior	5 5	Hoob no qhia txog keebkwm, ntau yam kev sau programming, kev tsim, thiab cov kev siv technology tshiab uas luag siv los tsim cov Web pages kom zoo nkauj. Cov menyuam kawm ntawv yuav siv Internet los tshawb nrhiav txog Web pages thiab ntau yam duab, uas siv electronic media los tsim. Dua li, yuav siv cov lus HTML/Java programming thiab cov software tsim duab nrog rau cov tswvim tsim thiab lo duab los tsim kom tau ib cov Web pages uas zoo nkauj thiab zoo siv hauv Internet. <u>Cov ntaub ntawv uas siv::</u> Microsoft Front Page 98, <i>Microsoft Front Page 98</i> , Course Technology Course Technology

Cov hoob tuamyem kawm uas tus menyuam kawm hauv txoj kev kawm STEM Academy yuav kawm tau yog:

- Animation
- Web Animation Mini-Hoob (Course)
- 3-D Game Simulation Mini-Hoob (Course)

Yog xav paub meej txog cov hoob kawm (academic courses) thiab cov hoob tuamyem kawm uas hais sau no, mus saib Section 1.

Thov hu mus rau lub tsev kawm ntawv yog koj xav tau kev qhia ntxiv.