5HVHDUFK RQ WKH [illegible] 3URJUDPPLQ[illegible]
&RXUVH %DVHG RQ 2XWFRPH EDVHG (GXFDWL[illegible]

<XKDQ <LELQJ [illegible]

&ROOHJH RI ,QIRUPDWLRQ 6FLHQFH [illegible]

$EVWUDFW [illegible] DW WKH SUREOHPV RI LQ[illegible]
FRQWHQW RI FRPS[illegible]
LQ FRPSXWHU PDM[illegible] 3URJUDPPLQJ SUDFW[illegible]
DV DQ H[DPSOH DQG [illegible] WKH JUDGXDWH[illegible]
FKDUDFWHULVWLFV [illegible] 7R LPSURYH [illegible]
LQQRYDWLYHQHVV RI SUDFWLFDO [illegible]
2XWFRPH EDVHG HGXFDWLRQ WKDW LQFRUSRUDWHV VFKRRO HQWHUSUL[illegible]
SDUWLFLSDWH LQ [illegible] SURYHG WR EH H[illegible]
LPSURYLQJ VWXGHQWV SUDFWLFDO [illegible]
VRFLDO UHFRJQLWLRQ

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7KH 1DWLRQDO 0HGLXP DQG /[illegible]
5HIRUP DQG 'HYHORSPHQW [illegible]
ILUP DQG XQZDYHULQJ FRPPLWP[illegible]
FXOWLYDWLRQ RI FRPSHWHQFLHV [illegible]
HQKDQFLQJ VWXGHQWV SUDFWLF[illegible]
:KLOH WKHUH KDYH EHHQ QRWDE[illegible]
\HDUV WRZDUG [illegible]
IUDPHZRUN IRU FRPSXWHU VFLHQ[illegible]
DQG FROOHJHV WKHVH DFKLHYHP[illegible]
LQ FRQYHQWLRQDO HGXFDWLRQD[illegible]
DSSURDFKHV KDYH WR D VLJQLI[illegible]
GHYHORSPHQW RI VWXGHQWV [illegible]
SURILFLHQFLHV HVSHFLDOO\ LQ [illegible]
FRXUVHV &RQVHTXHQWO\ PDQ\[illegible]
WKHPVHOYHV [illegible]
H[WHQGHG SHU[illegible]
WUDLQLQJ WR PHHW WKH HYROYLQJ UHTXLUHPHQWV RI WKH MRE
PDUNHW > @ 3URIHVVRU -LDQJ =RQJOL ZKR KROGV WKH
SRVLWLRQ RI 9LFH [illegible]
7HDFKLQJ *XLGDQFH &RPPLWWHH [illegible]
(GXFDWLRQ [illegible]
WUDQVIRUPDWLRQ LQ HGXFDWLRQDO SKLORVRSK\ ZLWKLQ WKH
FRQWH[W RI WKH 1HZ (QJLQHHULQ[illegible]
VKLIW HQWDLOV D PRYH DZD\ IURP WKH FRQYHQWLRQDO
FXUULFXOXP FHQW[illegible]
RXWFRPH FHQWHUHG PRGHO ,Q WKLV UHYLVHG DSSURDFK WKH
FHQWUDO HPSKDVLV LV RQ SUHSDULQJ VWXGHQWV ZLWK WKH
HVVHQWLDO VNLOOV UHTXLUHG WR HIIHFWLYHO\ DGGUHVV LQWULFDW[illegible]
HQJLQHHULQJ FKDOOHQJHV > @
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LPSRUWDQFH LQ QXUWXULQJ VWXGHQWV FDSDFLW\ WR WDFNOH

LQWULFDWH HQJ[illegible]
WKH 1HZ (QJLQHHULQJ LQLWLDWLYH [illegible]
DUH DFWLYHO\ [illegible]
LQQRYDWLYH [illegible] $PRQ[illegible]
FRXUVH [illegible] DQG 3URJUDPPLQ[illegible]
[illegible]

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8QGHU WKH GRPLQDQFH RI WUDGLWLR[illegible]
WKH GHYHORSPHQW RI SURJUDPPLQJ [illegible]
LQQRYDWLYH [illegible]
LV FRQVWUDLQHG > @
[illegible]

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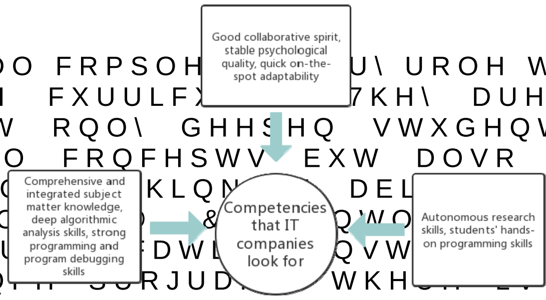
6ORZ XSGDWH RI SURIHVVLRQDO SURJUDPV

7KH GHVLJQ RI SUDFWLFDO FRXUVHV [...] VWXGHQWV HQJLQHHULQJ WKLQNLQJ [...] XQLYHUVLWLHV WR DFWLYHO\ HQFRXUDJH [...] SDUWLFLSDWLRQ LQ SUDFWLFDO [...] FROOHJH VWXGHQWV LQQRYDWLRQ [...] PDQ\ RI WKHVH SURJUDPV DUH [...] DVVLJQHG RU LQVWLWXWLRQDO[...] FRQQHFWLRQV ZLWK HQWHUSULVHV [...] IDOO VKRUW RI WUXO\ KRQLQJ V[...] WKHLU FDSDELOLWLHV &RQYHUVHO\ [...] GHVLJQ LQWHJUDWLRQ DQG FXO[...] HQWHUSULVH LQWHUQVKLSV DQG [...] YLWDO FRPSRQHQWV RI SURIHVV[...] VXEVWDQWLDO UROH LQ FXOWLYDWLQJ [...] WKLQNLQJ DELOLWLHV DV LOOXVWUDWHG [...] PHUH DQG RI LQWHUQVKLS [...] GHVLJQ WRSLFV IRU FRPSXWHU [...] LQVWLWXWLRQ DUH GLUHFWO\ [...] SURMHFWV $V D UHVXOW WKHUH [...] DQG GLYHUVLI\ WKHVH DSSURDFK[...] UHTXLUHPHQWV RI LQGXVWU\ SUD[...]



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8SGDWLQJ EDVLF SUDFWLFH [...] GHYHORSLQJ KDQGV RQ SUDFWLFDO V[...]

3UDFWLFH WHDFKLQJ VHUYHV DV D [...] FXOWLYDWLRQ RI QHZ HQJLQHHULQJ [...] HPSKDVLV LV SODFHG [...] NQRZOHGJH [...] VWXGHQWV [...] [illegible]

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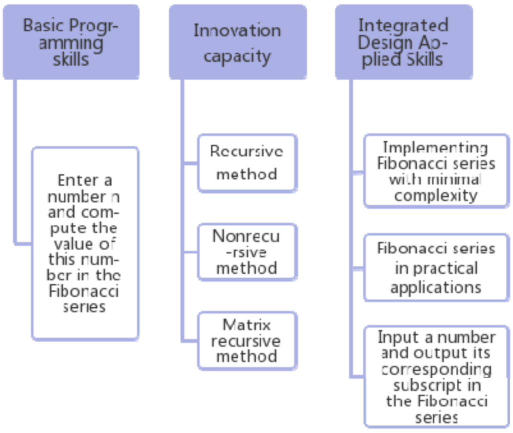

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)ROORZLQJ WKH QHHGV RI HQWHUSULVHV DQG FXOWLYDWLQJ HQJLQHHULQJ WKLQNLQJ VNLOOV

7KH QXUWXULQJ RI SUDFWLFDO HQJLQHHULQJ SURIHVVLRQDOV VKRXOG SLYRW EDFN WR WKH FRUH RI HQJLQHHULQJ SUDFWLFH 7KLV VKLIW VKRXOG HQFRPSDVV D PRGHO RI HGXFDWLRQ WKDW LQWHJUDWHV LQGXVWU\ DQG FROODERUDWLYH HGXFDWLRQ EHWZHHQ HGXFDWLRQDO LQVWLWXWLRQV DQG EXVLQHVVHV ,Q GRLQJ VR LW EHFRPHV HVVHQWLDO WR RYHUKDXO WKH PHWKRGV XVHG LQ WDOHQW FXOWLYDWLRQ >@

3.2.1.Modify talent development programs flexibly. *Actively invite enterprise experts to come to the classroom and participate in teaching together with teachers. These experts can adapt and diversify their teaching responsibilities, leveraging their strong theoretical foundation and practical algorithm implementation expertise. They will elucidate the underlying knowledge and real-world applications, bridging the gap between industry demands and educational objectives. By aligning our teaching goals with the needs of the business world, we not only foster students' engineering problem-solving skills but also groom them into the skilled professionals sought after by enterprises.*

3.2.2.Establish a school-enterprise cooperation program. Outside the traditional classroom setting, students are steered towards active participation in corporate internships, providing them with immersive experiences that expose them to the complexities of real-world organizational requirements and dynamics.

3DUWLFLSDWH LQ VFLHQWLILF UHVHDUFK DQG FRPSHWLWLRQV DQG GHYHORS FUHDWLYH WKLQNLQJ VNLOOV

7KH HPHUJLQJ ILHOG RI QHZ HQJLQHHULQJ HQFRPSDVVHV ... PHWKRGRORJLHV HQKDQFHG ... HGXFDWLRQDO V\VWHP>@ ,Q ... UHTXLUHG WR SRVVHVV QRW RQO\ ... UHVSHFWLYH VXEMHFWV EXW D ... FRPSHWHQFH

UHVHDUFK DQG FRPSHWLWLYH DFWLYLWLHV ... YLWDO DYHQXHV IRU FROOHJH VWXGHQWV ... WKLQNLQJ FUHDWLYH VNLOOV RUJDQ... WHDPZRUN 7KH\ SOD\ D FUXFLDO URO... QXUWXULQJ WKH VSLULW RI LQQRYDWLRQ ... DPRQJ FROOHJH VWXGHQWV HVSHFLDOO\ ... RI WKHVH QHZ HQJLQHHULQJ GLVFLSOLQHV ... FXUULFXOXP ... SDUWLFLSDWH LQ SURIHVVLRQDO FRP... EURDGHQ WKHLU KRUL]RQV DQG EROV... WKLQNLQJ VNLOOV 7KHVH FRPSHWLWLRQV ... HYHQWV OLNH WKH ,QWHUQDWLRQDO ... &RQWHVW ,&3& ZKHUHLQ VWXGHQWV ... DGYDQFHG DOJRULWKPV LQ WKH ILHOG ... SURYLGLQJ WKHP ZLWK D FRPSUHKHQ... WKH VXEMHFW

3.3.1.Build a professional competition management system. Organize students who are interested in competitions to participate in professional competition training after school hours, and provide professional and systematic training to students.

3.3.2.Develop innovative projects. Academic competitions go beyond the boundaries of involvement in competitions at the national, provincial, and municipal levels organized by industry associations. They are shaped by the demands of professional training, following an educational approach that emphasizes teacher guidance and student leadership, placing students at the core of the learning experience[15]. This approach not only encourages students to explore and innovate but also empowers them to formulate their unique project topics. With the guidance of teachers, students collaborate to design their own experimental programs, step by step crafting personalized practical projects that help develop their capacity for collaborative innovation.

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$ FXUULFXOXP DVVHVVPHQW FHQWHU ... JURZWK LV GHVLJQHG ZLWK D NHH... GHYHORSPHQW 7KLV FRPSUHKHQVLY... JUHDWHU HPSKDVLV RQ RQOLQH LQWH... KLJKOLJKWLQJ WKH SURJUHVVLRQ RI ... DVVHVVPHQW SURFHVV LQFRUSRU D W... -XGJH 2- DVVHVVPHQW IRUPDW IURP... HOHYDWLQJ WKH HYDOXDWLRQ ... PDVWHU\ WR HYDOXDWLQJ WKH FDSD... HQJLQHHULQJ ... LQWHUQDOL]DWLRQ ... GHWDLOHG LQ)LJ

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8SRQ WKH FRQFOXVLRQ RI HDFK WHDFK... HQFRPSDVVHV ... PHWKRGRORJLHV ... TXHVWLRQQDLUH ... HGXFDWLRQDO ... UHTXLUHG WR ... UHVSHFWLYH ... FRPSHWHQFH ... 7KHVH ... WHDP WR SURPSWO\ ...

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WKHVH LQVLJKWV WKH FRXUVH X
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RI HQKDQFHPHQW 7KLV UHOHQ
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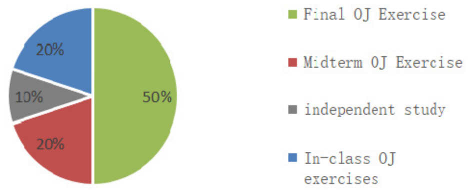

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HQWKXVLDVWLF H[SORUDWLRQ 7KLV VKLIW
WR HQJDJH DFWLYHO\ LQ WKH OHDUQLQJ
SURDFWLYH UROH LQ WKHLU HGXFDWLRQ
IRU SUDFWLFDO FRXUVHV QRW RQO\
XQGHUVWDQGLQJ EXW DOVR IXHOV D
WKHLU SUDFWLFDO LQQRYDWLRQ VNLOOV DUH FRQWLQXDOO\
VWUHQJWKHQHG FUHDWLQJ D
GHYHORSPHQW

)LJXUH 6WXGHQWV
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WKHRUHWLFDO XQGHUVWDQGLQJ
WR HQULFK VWXGHQWV FRPSXWDWLRQD
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FRPSUHKHQVLYH DSSURDFK OHDGV WR
WKH MRE PDUNHW DQG RSHQV GRRUV
SXUVXLWV DV VWXGHQWV DUH ZHOO H
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SDUWLFLSDWHG LQ $&0 FRPSHWLWLRQ\
EHWWHU HPSOR\PHQW SURVSHFWV FRPSDUHG WR WKHLU SHHUV
DORQJ ZLWK D QRWDEO\ KLJKHU UDWH
7KH GHVWLQDWLRQ VWDWLVWLFV
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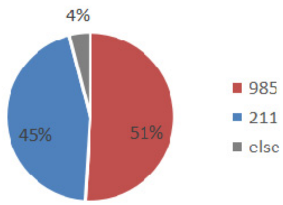

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,QWHUQHW JLDQWV VXFK DV $OLE
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FRPSDQLHV OLNH *RRJOH DQG 0L
RI WKH JUDGXDWHV KDYH HPED
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8QGHUJUDGXDWH HGXFDWLRQ L
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FXUULFXOXP UHIRUP SURJUDP
DQG FRPSHWHQF\ GULYHQ HGXF
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DQG WKH DQQXDO FHUWLILFDWLRQ
7KHVH HYDOXDWLRQV DUH V\V
SUHGHILQHG REMHFWLYHV JXDU
FRQVLVWHQWO\ UHYROYHV DURX
XQGHUJRHV D FRQWLQXRXV SUR
XOWLPDWH JRDO RI WKLV DSSU
JHQHUDWLRQ RI YHUVDWLOH
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