

**MECHANICAL ENGINEERING
GRADUATE PROGRAM
HANDBOOK**

P O G A M O F D

MA E ! DEG EE :! ()%! -%5#416%,

MAJO P OFE O ANO PE IO COMMI EE O

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.!!@&,+%70%,12IH#22!\$4#-0#1!+10-%,1+!,%-%!&!6%%1!)%!'#8021IH!-%1%46*,%1)%*4!
'*%2-+!&!*,1%4%+1H!#, -!+%2%81!&,%'#8021!6%6.%4!#!#!6#&4!54&'%++&4!#, -!#- -*&, #2!
'#8021!#!#+!+05%43*+&4!8&66*11%6%6.%4+=!!()%8&66*11%60+! !.#554&3%-!#, -!
#55&*,1%-! .!!1)%!>4#-0#1%! "4&\$4#6! ; *4%81&4=!!K&4!1)%!9#+1%4!+! -%\$4%%!A*1)!#!1)%+*+!
&51*&,H!#!6#&4!54&'%++&4!#, -!A&!8&66*11%6%6.%4+!#4%!4%70*4%-!!K&4!#!")= ; =!-%\$4%%H!
#!6#&4!54&'%++&4!#, -!#!6*, *606!&'!&04!#- -*&, #2!6%6.%4+!#4%!4%70*4%-H!&, %!&'!A)*8)!
60+! .%!'4&6!#! -*'!%4%,1!%, \$*, %%4*, \$! -%5#416%,1!#, -!&, %!'4&6!#, &1)%4!8&22%\$%=! ()%!
'&46#1*&, !&'!1)%!+05%43*+&4!8&66*11%60+! .%18&652%1%-!-04*, \$!1)%!'4+1!#8#-%6*8!1%#4!
&'! ?10-! =!!K#*204%!1&!8&652!A*1)!1)*+!4%70*4%6%,1!6#!!4%+021!* ,!1)%!2&+!&'!*, #, 8*#2!#* -=!
?10-%,1+!6#!!6#/%18)#, \$%+!1&!1)%!+05%43*+&4!8&66*11%05!0, 1*2!1)%!+%6%+1%4! .%&4%!
1)%!\$4#-0#1*&, !+%6%+1%4= !

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NON-DEG EE Eeking DEN

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?10-%,1+!A)&!#4!70#2**%-!1&!%,4&22!*,!+5%8**8!\$4#-0#1%18&04+%+.01!A)&!-&!,&1!*,1%, -!1&!
A&4/!1&A#4-!#!\$4#-0#1%1-%\$4%%!6#!1!%,4&22!#!+,&,E-%\$4%%!+%%/*,\$!+10-%,1+!!f&,E-%\$4%%!
+10-%,1+!6#!1!%,1%4!82#++%+!&,!#!+5#8%E#3#*2#.2%! .#+*+! -04*, \$!1)%!'4+1!A%/%!&'!%#8)!
+%6%+1%4! .!!&.1#*,*, \$!1)%!8&, +%,1!&'!1)%!8&04+%!* ,+14081&4!#, -!>4#-0#1%! "4&\$4#6!
; *4%81&4=!!?10-%,1+!60+!6%%1!1)%!54%E4%70*+*1%+!&'!8&04+%+!* ,!A)*8)!1)%!A*+)!1&!%,4&22=!!
N!6#P*606!YT!)&04+!&'!84%-*1!%#4,%-!#!#!, &,E-%\$4%%!+10-%,1!6#!1! .%#552%-!1&!+#!*+!1!
9?9: !-%\$4%%!4%70*4%6%,1+?!?10-%,1+!60+!1%#4, !#!\$4#-!&'!M!&4! .%11%4H!#, -!1)%!8&04+%!
60+! .%!+0*1#.2%!&'!&4!1)%!54&\$4#6=!!()*+!14#8/!'&4!%,1%4*, \$!\$4#-0#1!+10-!1)!#+! .%%, !&O, -!
%+5%8*#22!1)%25'02!1&!+10-%,1+!* ,!

MA E DEG EE!

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! M%'&4%!\$4#-0#1*,\$H!1)%!9?9:!(A*)!)%+*!14#8/!+10-%,1+!60+!54%5#4#!#1)%+*!#,-!
54%+%,!1*!1!&1!1)%! ?05%43*+&4!@&6 6*11%=%!()%!+10-%,1!60+!54%+%,1!#1!15%-!* ,#2!
-4#1!1!&1!1)%! ?05%43*+&4!@&6 6*11%=%!#,-!>4#-0#1%!N-3*+&4!&,%!A%/! !.%'&4%!1)%!
!* ,#2!&4#2!%P#6* ,#1*& ,=!

!

! 9?9:!(A*)&0!1!1)%+*!14#8/!+10-%,1+!60+!+0.6*1!1A&54&<%8!14%5&4!+!8&652%1%-!#+!
5#4!1!&1!1)%! :9[!8&04+%A&4/!4%70*4%6%,1!1!&1!1)%!>4#-0#1%! "4&\$4#6! ; *4%8!&4!-04*,\$!
1)%!+6%+1%4!&!'\$4#-0#1*& ,!'&4!%3#20#1*& ,!#,-!#++%++6%,1=!K#?2*,\$!&4!%+5& , -!1!&1!#!
4%70%+!1A*2!54%3%,1!+10-%,1+!'4&6!\$4#-0#1*,\$=!

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! N2!A&4/!#552*8#.2%!1!&1!1)%!9#++1%4!+!-%\$4%14%70*4%6%,1+!60+! !.%!8&652%1%-!A*1)* ,!
*3%!1%#4+!'4&6!1!1)%!1*6%!1)%!+10-%,1!+!'4+!1!#-6*11%-!* ,1&!) *+D)%4!54&\$4#6=!

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P .D. DEG EE!

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! ?10-%,1+!60+! !.%!#-6*11%-!1!&8# , -* -#8! !.%'&4%!1)%! !4%\$*+1%4!'&4!- *++%41#1*& ,!)&04+=!
?%#1!1)%!W?K!>4#-0#1%!@#1#2&\$!'&4!4%70*4%6%,1+!'&4!#-6*++*& ,!1!&8# , -* -#8! =!

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! ()%!+10-%,1!60+!18& , -08!1# ,!* ,3%+1*\$#1*& ,!4%+02!*\$! ,!# ,!&4*\$* ,#2!# , -!+*\$* ,**8# ,1!
8& ,14* .01*& ,!1!&1!1)%! / ,&A2%-\$%* ,!1)%!8)&+%,!'*%2-!&'14%+%#48)=!!?10-%,1+!* ,!1)%!")= ; =!
54&\$4#6!60+!1!#/#!#!6* ,*606!&'!ZR!)&04+!&'! -&8!&4#2!- *++%41#1*& ,!84%-*1+=!

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! L ,8%!#-6*11%-!1!&8# , -* -#8!H!+10-%,1+!60+!1%,4&22!'&4!#!6* ,*606!&'!Z!84%-*1!)&04+!
%#8)!+6%+1%4!&'!1!1)%!#8#-%6*8!1%#4!0 ,1*2!8&652%1*& ,!&'!1!1)%!54&\$4#6=!

!

! M%'&4%!\$4#-0#1*,\$H!1)%!")= ; =!+10-%,1+!60+!54%5#4#!#1!- *++%41#1*& ,!# , -!54%+%,1*!1!
1!&1!1)%! ?05%43*+&4!@&6 6*11%=%!()%!+10-%,1!60+!54%+%,1!#1!15%-!* ,#2!-4#1!1!&1!1)%!
?05%43*+&4!@&6 6*11%=%!#,-!>4#-0#1%!N-3*+&4!1A&!A%/+! !.%'&4%!1)%! !* ,#2!&4#2!
%P#6* ,#1*& ,=!

!

! N2! A&4/!#552*8#.2%!1!&1!1)%!")= ; =!4%70*4%6%,1+!60+! !.%!8&652%1%-!A*1)* ,!+3% ,!
!%#4+!'4&6!1!1)%!1*6%!1)%!+10-%,1!+!'4+!1!#-6*11%-!* ,1&!) *+D)%4!54&\$4#6=!

MECHANICAL ENGINEERING FACULTY AND AREA OF SPECIALIZATION

D !B " 4&'%++&4D@) #*4F! ")= ; =C!@2% 6+&, !W, *3%4+*1IH!Y] `X\!O%)# . *2*1#1*&, !O& . &1*8+!\ " 4&+1) %1*8+!@, -!L41) &1*8+!\!@I, #6*8! ? I+1% 6+!#, -!@&, 14&2+!\ -0. % I h 0+ '= % -0!

!

N D -E !BN++*+1#, ! " 4&'%++&4F! ")= ; =C! W, *3%4+*1I! &! @#2* &4, *#H! M%4/%2% IH! ZRYQ! 9#, 0'#8!04*, \$H! ? 6#4! #, -! ?0+1#*, #.2% ! ? I+1% 6+H! ; #1#E; 4*3%, ! 9&-%2, \$!\ , #, 8I -Y h 0+ '= % @!!

!

J G BG, +14081&4!GGF! ")= ; =C! d*4\$, *#! (%8)H!ZRY! J06#, EO& . &!@&2# . &4#1*3% ! ? I+1% 6+H! @&EO& . &1*8+! (%8), &2&\$! !' &4! f &, E(4#- *1*&, #2! " &502#1*&, +H! ? (: 9! : -08#1*&, H! ?%, +&4! "%48%51*&, \!\$#* , @ < h 0+ '= % -0=!

!

N G !BN++&8*#1%! " 4&'%++&4F! ")= ; =C! >%&4\$*#! G, +1*101% ! &! (%8), &2&\$! H! ZRRS! M* & @#1%4*#2+!# @ -! @ - @ %! : , \$*, %%4*, \$!\ , #2#, 1 h 0+ '= % -0!

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M G !BG, +14081&4!GF! ")= ; =C! M&+1&, !W, *3%4+*1IH!ZRY `!\ f #, &+ @ #2%! J%# @ (4#, + @ ! #, -! ? &2* -! 9%8) #, *8+!\ 6\$&, *4& -4*\$& h 0+ '= % -0!

!

G !BN++&8*#1%! " 4&'%++&4D>4#-0#1%! " 4&\$4#6! ; *4%81&4F! ")= ; =C! >%&4\$*#! G, +1*101% ! &! (%8), &2&\$! H! ZRR `!\ 9*84&'20* -*8+H! N8&0+1*8+H! : , \$*, %%4*, \$!\ : -08#1*&, \! \$02-*/@, h 0+ '= % -0@

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D P. H !B " 4&'%++&4F! ")= ; =C!

O

F P , III! BG, +14081&4!

"#\$% 9 & ' 10

IMPO AN CON AC FO G AD A E DEN

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>ON;WN(:!N;9G??GLf?!! ! ! ! ! Gf(:OfN(GLfN[!?:OdG@:?!)